



Everybody's Garden Guide

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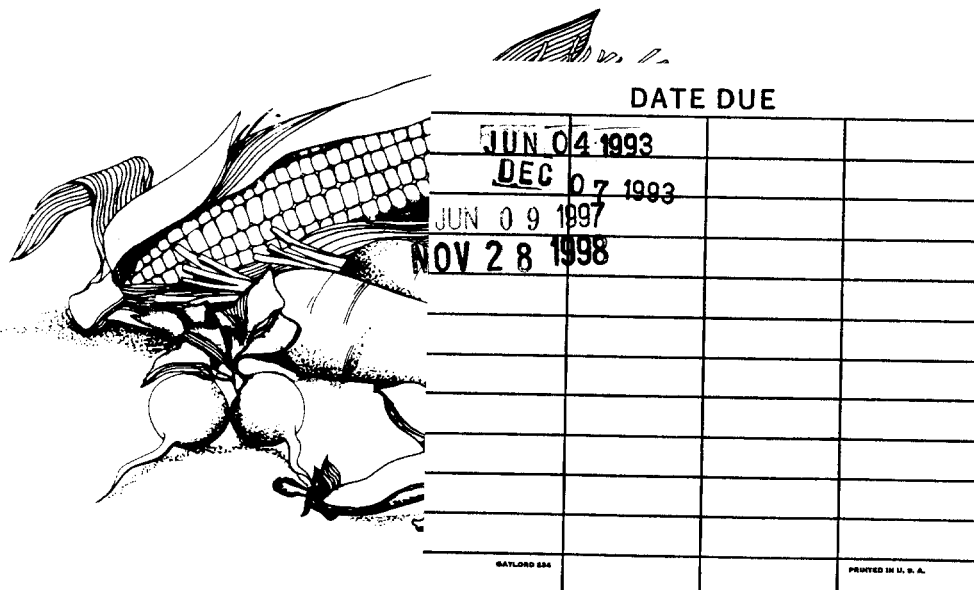
*Our thanks goes to the first gardeners of the
Americas ... and especially to the families of
Wakan Tanka:
the Arikara, Assiniboin, Cheyenne, Crow, Hidatsa,
and Mandan people ...
for giving us seeds of strength and showing us how to
touch the Earth to give good fruits.*

*Robert G. Askew
Stephen L. Mills*

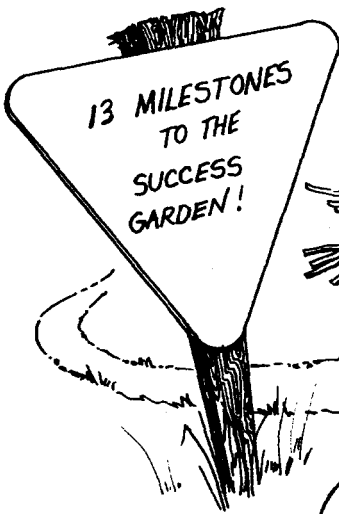
Why A Garden?

We people have found many different reasons for wanting to raise vegetable gardens. For most of us, a garden can be seen as a backyard supermarket where plentiful, dewy-fresh vegetables and fruits can bless our tables. Even during winter months, we may feast upon home-canned, dried, fresh frozen or stored garden produce harvested and processed at its peak of valuable vitamins, minerals and proteins that maintain our health and energy. The well cared for home garden can usually give us more food of higher quality and for less cost than today's grocery market vegetables.

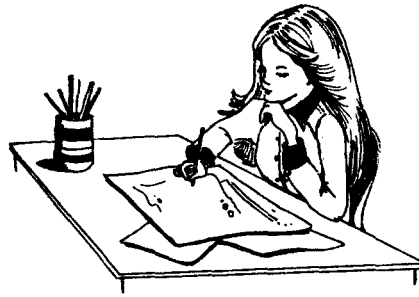
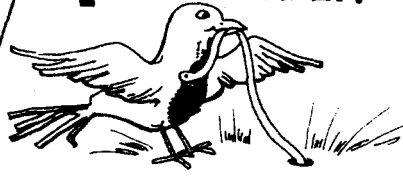
People of all ages gain a special satisfaction from the fun of outdoor exercise, from the sharp and sweet flavors of home-grown fruits and vegetables, from the chance to share gardening fun and the harvest with family, friends and neighbors. A healthy, weed-free home vegetable garden not only brings beauty to unused, littered, vacant lots or backyard spaces, but also allows us to watch the inspiring mysteries of Nature unfold as plants grow.



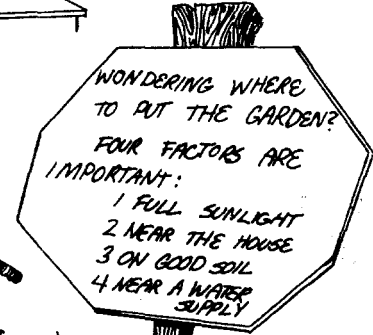
The



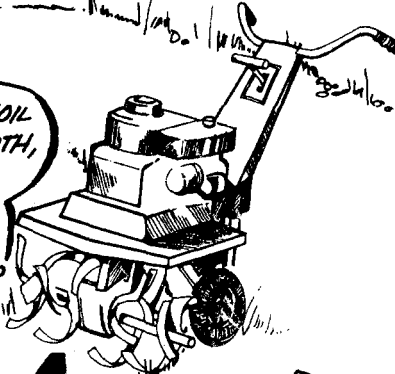
1 **START EARLY!**



2



TURNING THE SOIL WILL GIVE IT WARMTH, FRESH AIR, A MIXING OF ORGANIC MATTER, AND WILL BREAK UP SOIL CHUNKS.

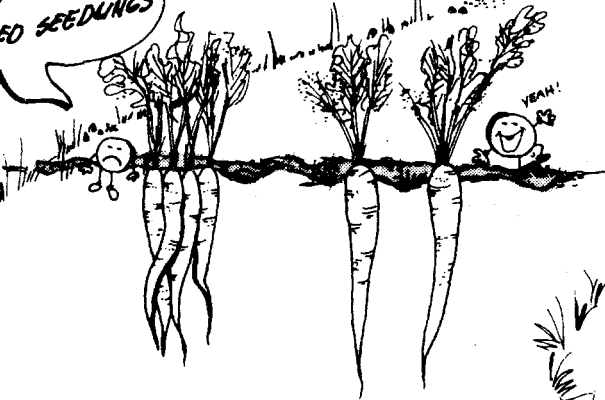


3

WE ARE READY TO GROW, IF YOU ARE READY TO SOW!

CROWDED VEGETABLES GET TOUGH, TINY, BITTER + BUMPY... THIN OUT OVER-CROWDED SEEDLINGS

6



5

AWAY WITH WEEDS! WEEDS ROB VEGETABLES!

7



8

IF YOU ARE LOOKING FOR THE BEST VARIETIES, ASK YOUR FRIEND!



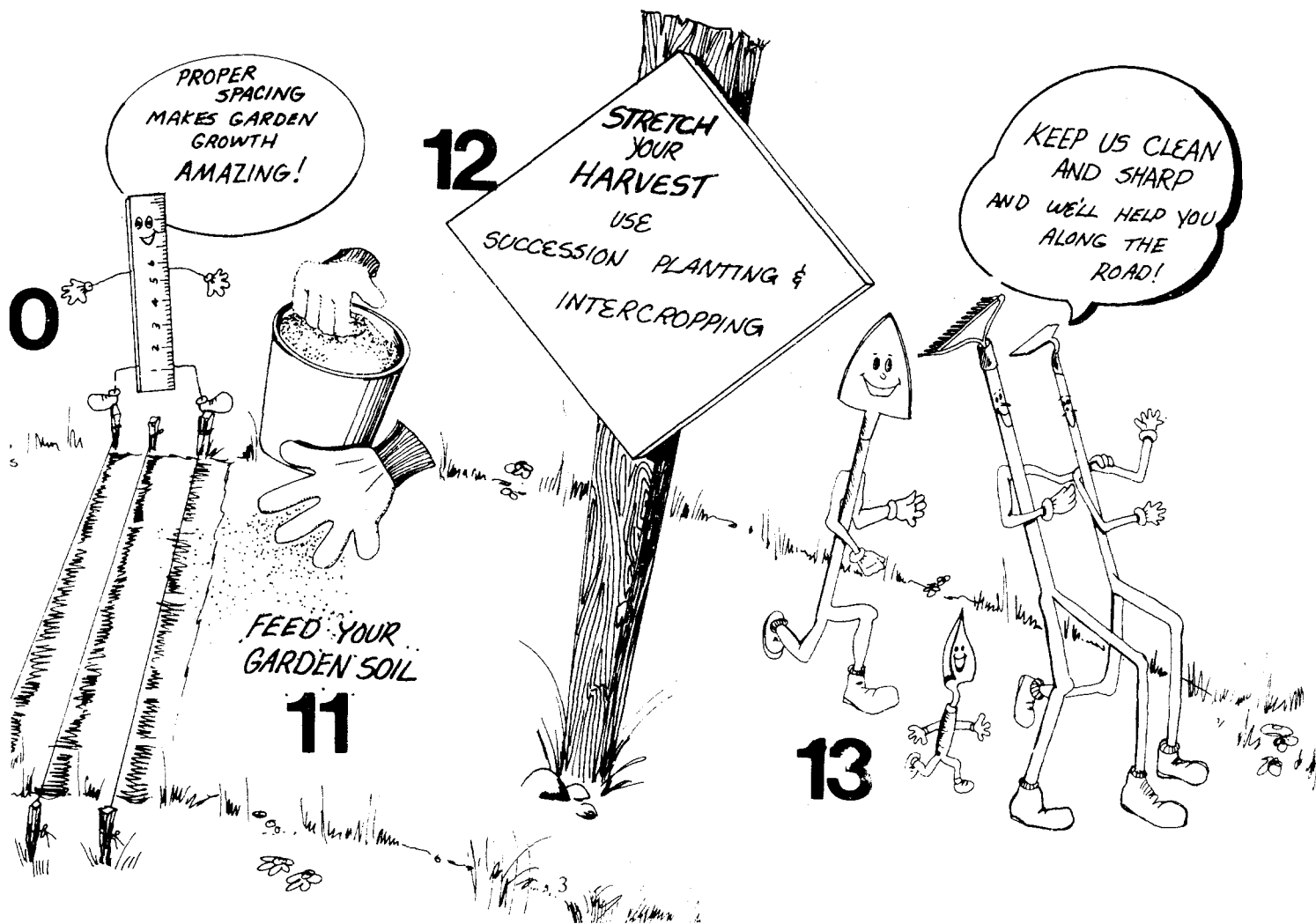
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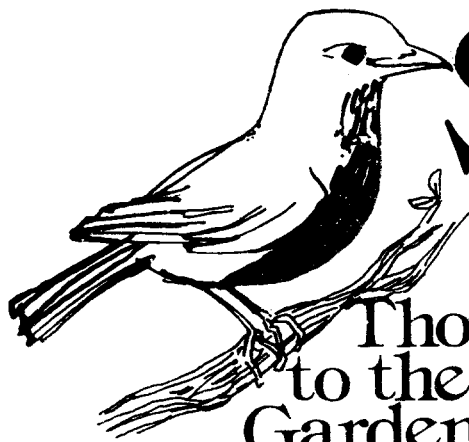
Lucky Thirteen



What A Successful Gardener Does...

- 1 — Start early. See pages 4-5
 - 2 — Draw a map of how you will arrange and plant your garden. Your map will show the amount of space between each plant and between rows. Don't forget to follow your map when planting day arrives. See page 6
 - 3 — Choose a sunny location for the garden as near to your home as possible for easy weeding and harvesting and close to a water supply. See page 7
 - 4 — Soil should be loose, fertile, and well drained. See pages 8-9
 - 5 — Here comes the fun! Planting. See pages 10-13
 - 6 — Thin out overcrowded seedlings. See page 14
 - 7 — Control the weeds when young throughout the entire season by tilling, hoeing and mulching. See pages 15-16
 - 8 — Use seeds or plants of recommended vegetable varieties. See page 17
 - 9 — Water correctly. See pages 18-19
 - 10 — Allow proper spacing between plants and between rows of plants. See page 19
 - 11 — Feed your garden soil. See pages 20-21
 - 12 — Learn about succession planting and intercropping. See page 22
 - 13 — Keep tools clean and sharp. See page 22
- * THE GARDEN PROBLEM GUIDE. See page 23
 - * THE A, B, C GANG (The Vegetable Crops). See pages 24-30
 - * THE GOOD GUYS. See page 30





Thoughts to the new Gardener...

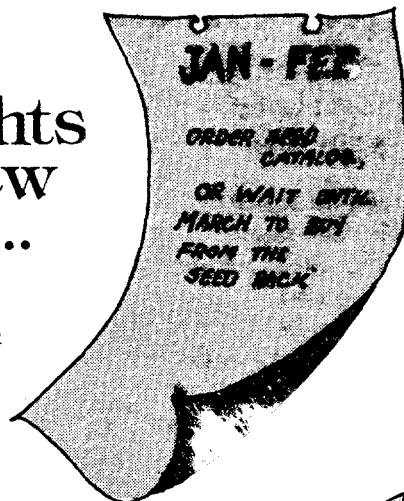
Think small - a small weed-free garden will produce more and better vegetables than a large, unkempt garden.

Start with the easiest-to-grow vegetables - and those your family likes best. . .such as: beans, beets, carrots, chard, lettuce, onions, peppers, radishes, tomatoes, or zucchini squash.

Don't plant everything too early - you may lose seed of the tender vegetables in cold, wet soil, or lose transplants from late frosts.

The tools you need - a spade, a rake, and a hoe—are like best friends to a gardener. You may want to get together with neighbors and rent a roto-tiller from a local hardware store. Buying a roto-tiller is often unwise for a backyard garden since it is used only three or four times each year.

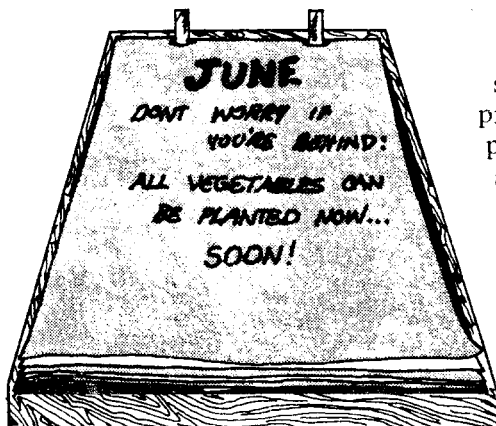
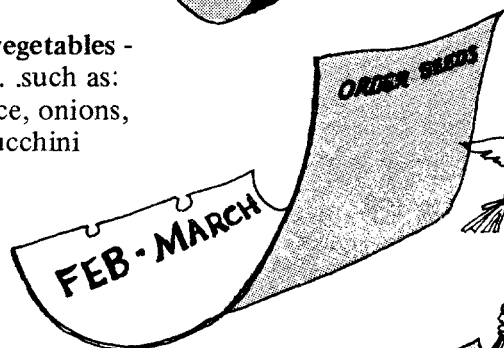
Start Early...



Make a good seedbed - when the soil is dry enough.

- * Add your compost, rotted manure, or fertilizer.
- * Dig in with a spade, roto-tiller, or plow.
- * Rake the soil until it is fine, level and crumbly before planting.

Vegetable gardening is a family adventure - did you know gardening can be fun - not work? Family members, older folks, neighbors, and friends can "fun" together in the open air. . .sweat, feel the sun, get a tan, show the kids about soil and growing plants, and enjoy crunching that first carrot or raw pea. It's the simple joys that count!



It's not too late! - if you didn't get your garden started until early June, you can still plant vegetables and expect success most seasons. You will want to prepare a fertile seedbed, space your plants and rows, thin your seedlings, and pull all weeds to make it work.

“HARDY”
Early Spring
 PLANT AS SOON AS SOIL CAN BE WORKED.

Asparagus
 Broccoli
 Cabbage
 Onions
 Peas
 Radishes
 Rhubarb
 Rutabaga
 Spinach
 Turnips

“HALF-HARDY”
Mid-Spring
 SOW SEED OR TRANSPLANT HARDENED PLANTS A WEEK OR TWO BEFORE THE AVERAGE DATE OF THE LAST KILLING FROST IN YOUR AREA.

Beets
 Carrots
 Cauliflower
 Lettuce
 Parsnip
 Potatoes
 Swiss Chard

“TENDER”
Early Summer
 SOW SEED OR TRANSPLANT AFTER THE AVERAGE DATE OF THE LAST KILLING FROST IN THE AREA

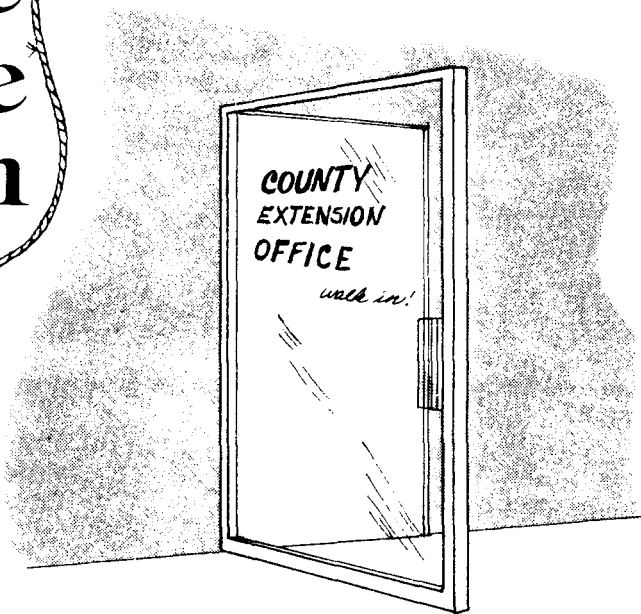
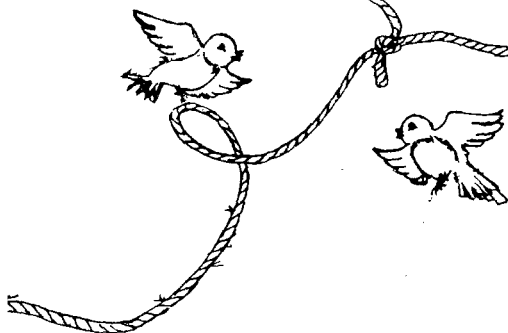
Beans
 Cantaloupe
 Cucumbers
 Peppers
 Pumpkins
 Squash
 Tomatoes
 Watermelons

Will tolerate freezing temps.

Will tolerate light frosts.

Are damaged by frosts.

Look Here For More Information



From your County Extension Office you can have:

North Dakota State University, Fargo

- Circular H-1 Garden Varieties
- H-266 Potatoes for Home and Market Gardens
- H-61 Asparagus and Rhubarb
- H-149 Harvesting and Storing Vegetables
- E-331 Garden Insect Control Guide
- PP-469 Plant Disease Control in the Home Garden
- H-887 Controlling Slugs in Home Gardens
- PP-756 Potato Disease Control in the Home Garden
- PP-659 Disease Control in Home Grown Tomatoes

Manitoba Dept. of Agriculture, Winnipeg, Manitoba

Number 341 Recommended List of Vegetables

South Dakota State University, Brookings

PS-489 Vegetable Varieties for South Dakota

University of Minnesota, St. Paul

AG-FO-1425 Suggested Vegetable Varieties for Minnesota

From popular publications you may wish to choose:

Ortho Book Series - Chevron Chemical Co.

- All About Vegetables (Midwest-Northeast Edition)
- 12 Months Harvest
- When the Good Cook Gardens
- All About Pickling
- All About Tomatoes

Countryside Books

- Raise Vegetables, Fruits and Herbs Without a Garden - "Doc" and Katy Abraham
- How to Plant a Vegetable Garden - Derek Fell

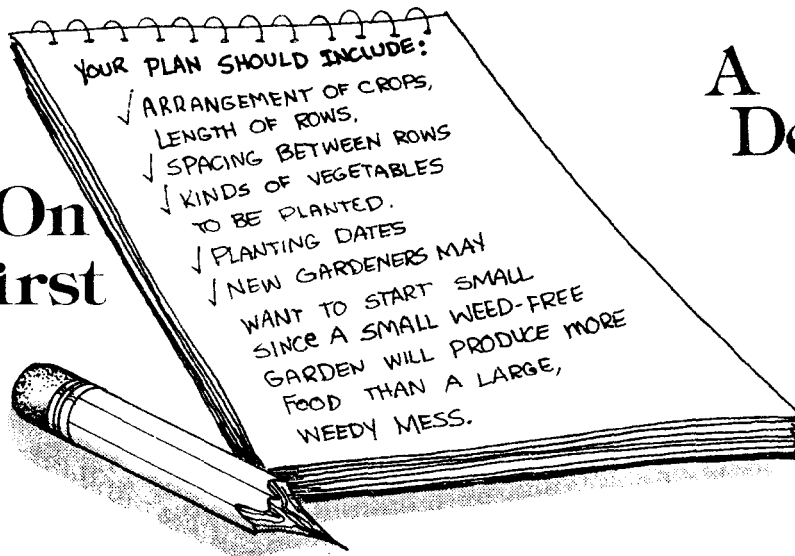
Sunset Books

- Vegetable Gardening

Plan for the Garden

* Draw a map of how you will arrange and plant your garden. Your map will show the amount of space between each plant and between rows. Don't forget to follow your map when planting day arrives.

Plan Your Garden On Paper First



A Desirable Garden Location:



- Free of shade
- Fertile, well drained soil
- Nearby source of water
- Close to house

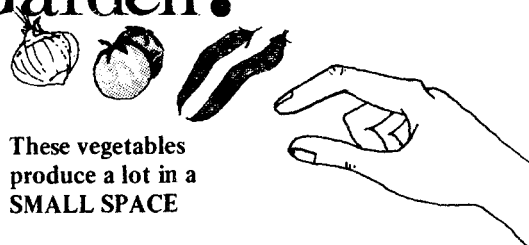
Helpful Hints for the Small Garden:

You'll get more food for the table from your small garden space by growing these vegetables:

Tomato
Radish
Lettuce

Beans (Pole or Snap)
Bush Squash and Pumpkin
Swiss Chard

Potatoes
Onion (Sets)
Peas



These vegetables produce a lot in a SMALL SPACE



(Plant tall crops on the north side of the garden so they won't shade the shorter vegetables.)

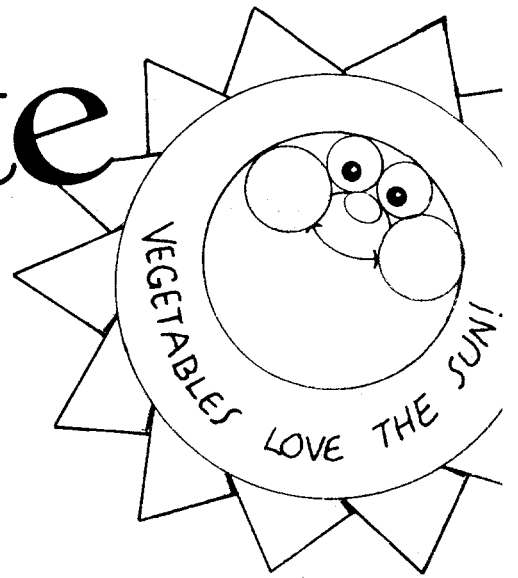
Raised beds and/or containers for growing vegetables will save you space.



THESE CROPS MAY NEED TOO MUCH SPACE FOR YOUR GARDEN:

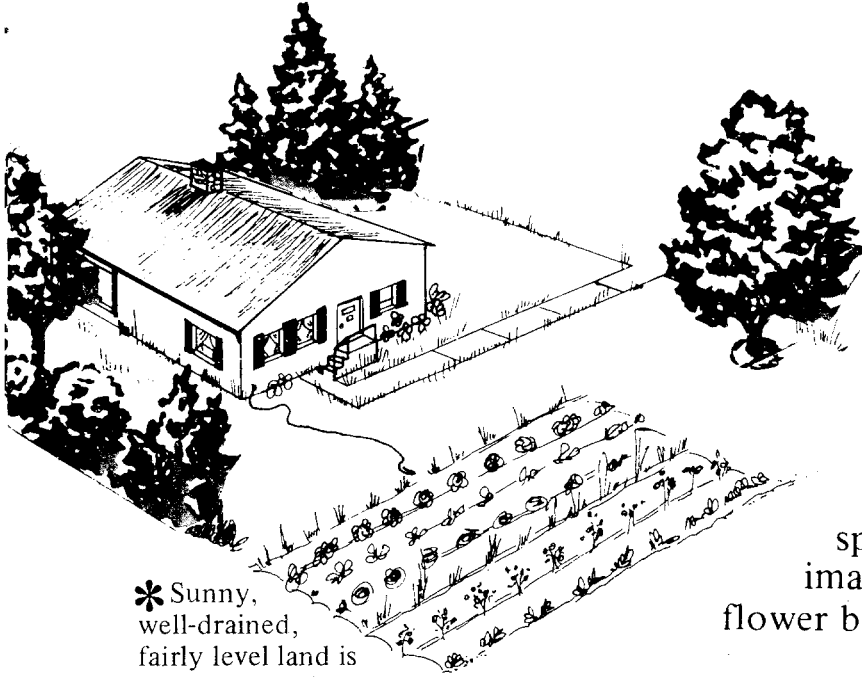
Melons
Vine Squash and Pumpkin
Sweet Corn

Where to put the Garden **Locate**



* Choose a sunny location for the garden. . .

* Locate the garden near your home so you can work in it when you have a few minutes. It is exciting when you are close enough to watch it grow.

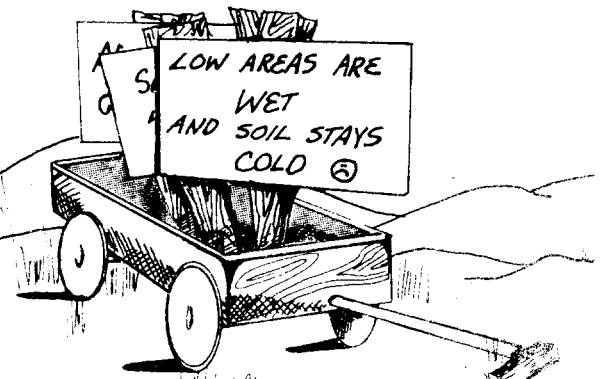
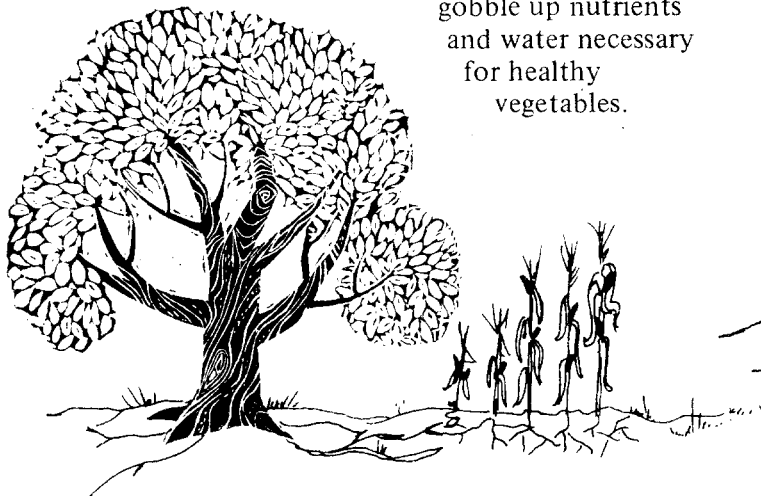
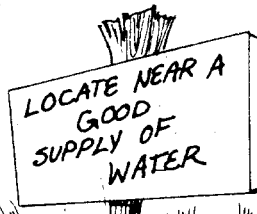


* Sunny, well-drained, fairly level land is best, but gentle slopes will do. South facing slopes are warmer. Protect your garden from winds, if possible, behind treebelts, snowfence or with three or four rows of sweet corn.

Don't worry if you don't have much space. An area as small as a compact car can be more fun and fruitful than a large garden several blocks or miles away. Pick a sunny spot. If you don't have a yard, use your imagination. . . try lettuce and greens in a flower box or tomatoes and peppers in pots on the porch.

If possible, the garden should be located away from the shade and roots of the shrubs or trees in your yard.

Not only do these bigger plants compete for sun but they also gobble up nutrients and water necessary for healthy vegetables.



Start With Soil Garden Soil and its Care

Soil is alive! It is a special mixture of minerals, decaying leaves, plant stalks, animal wastes, air, water and many very tiny living plants and animals. Soil gives your vegetables the nutrients and water they need to grow. You can help the soil. Plants, as well as children, need a well-balanced diet of food to thrive. The soil is their cupboard and this must be well stocked to produce more of your favorite vegetables. Keep the soil loose and healthy by adding some organic matter. Most soils do not have enough nutrients to grow lots of really good vegetables, so it is important to use compost, rotted manure or fertilizer. Spade, roto-till or plow in the fall to loosen it up so water can seep in and you can get into the garden earlier the next spring.

HELP YOUR SOIL. . . by adding organic matter.

What is organic matter? It is tree leaves, tomato vines, carrots, cornstalks, earthworms, animal manure or just anything that comes from plants or animals. When tiny soil bacteria and molds begin decaying the organic matter, it becomes compost or humus.

How does compost help? Compost is the pantry and cupboard of the soil. It acts like a "sponge" to hold water, fresh air, and plant food.

How can we make compost? (See page 21.)

In The Fall..

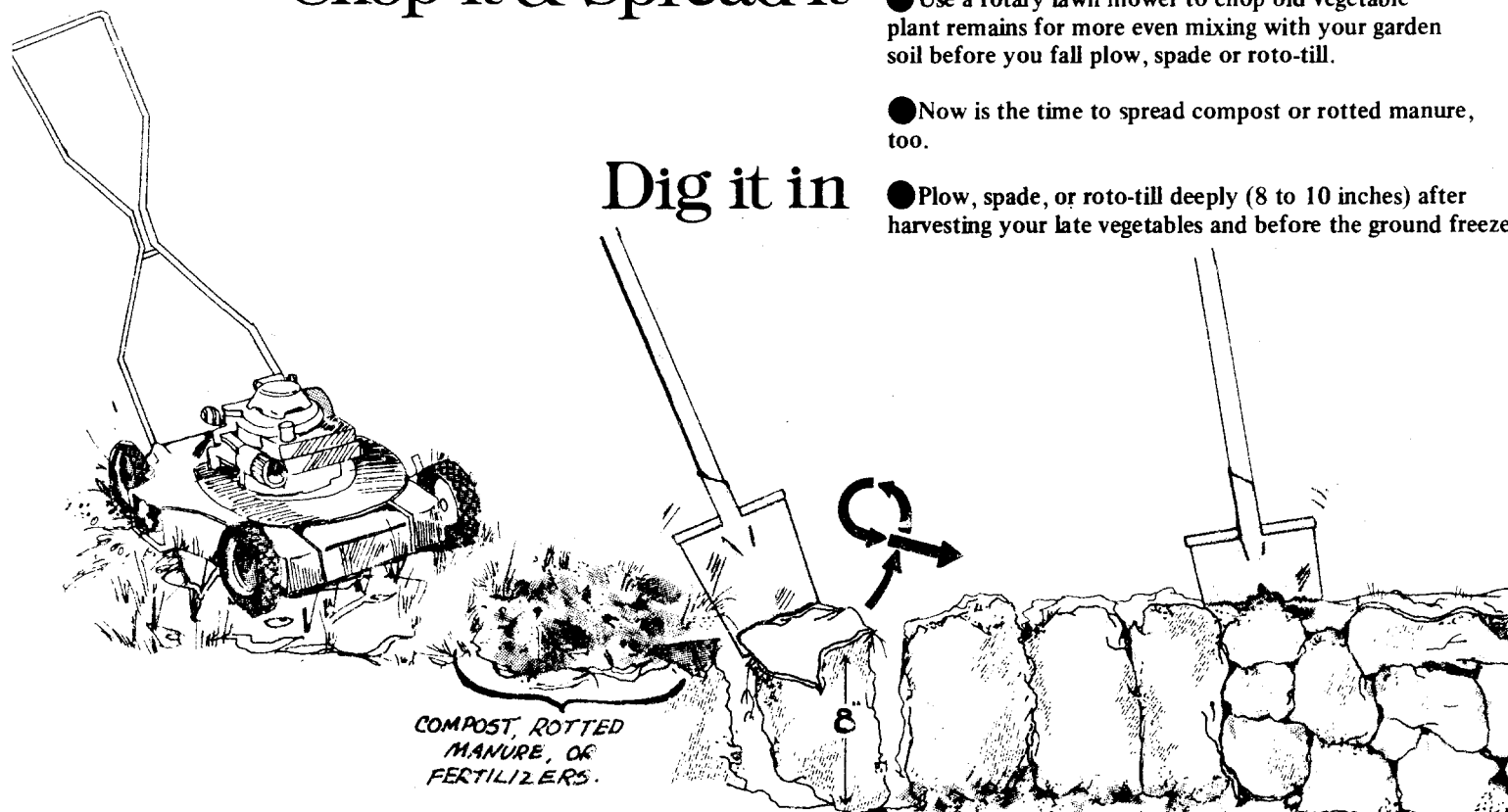
Chop it & Spread it

● Use a rotary lawn mower to chop old vegetable plant remains for more even mixing with your garden soil before you fall plow, spade or roto-till.

● Now is the time to spread compost or rotted manure, too.

Dig it in

● Plow, spade, or roto-till deeply (8 to 10 inches) after harvesting your late vegetables and before the ground freeze





The New Garden Spot...

(In full sunlight, near a water hose or a well, on well-drained soil, away from weeds, that are tough to kill and tree roots.)

FIRST: Remove stones, sticks, litter, and trash.
Remove sod with a spade and use it to patch your lawn or put it in a compost pile to decay or rot.
Now is the time to spread compost or rotted manure too.

If you have begun your new garden in the fall, your next step is to plow, spade or roto-till your garden deeply (8 to 10 inches).

If you have begun your new garden in the spring, your next step is to spade or roto-till the soil about 4 to 6 inches deep and prepare a mellow bed for your seeds.

◀ 'Soil is Alive!'

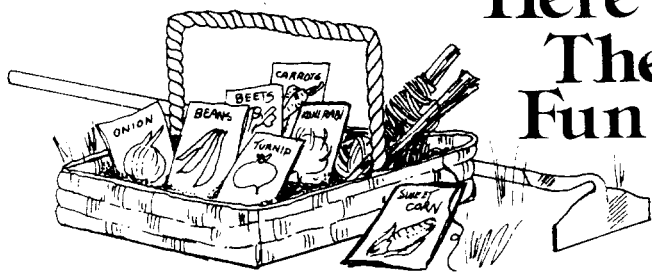
In The Spring...

How do you wake up a garden?

Stir it~Warm it

● Apply an even layer of compost, rotted manure or dry fertilizer over the garden soil followed by a shallow roto-tilling or spading (4 to 6 inches deep) to give the soil warmth, fresh air, a mixing of dead plants and to break up soil chunks.





Here Comes The Fun...

Planting

Here are a few hints before planting:

- * Layout rows lengthwise in your garden to make roto-tilling easier with less turning.
- * Every footstep on your freshly stirred garden soil will pack the soil and make planting furrows and transplant holes harder to dig. **Don't step where the rows are going to be before you plant.**
- * Save space on the north side of your garden for **tall growing vegetables**, like corn, so the "shorties" can have some sun too!
- * If you're planting in early spring, save space for planting **warm season crops**, like tomatoes.
- * Avoid planting the same vegetables in the same spot that they grew the previous year. This means **crop rotation** to avoid plant disease problems.
- * If your garden is in a low spot, don't wait until it's a lake! Dig your ditches now to drain away extra water in case of heavy rain.

Straight rows are easier to cultivate, help you tell the vegetable plants from weeds and are neater than crooked rows.

How Do We Make Straight Rows?

Anchor heavy string tightly on sturdy stakes at the ends of the row being prepared. These stakes, string and all, can be moved each time another row is to be smoothed for seeding. So, you'll need only two extra-heavy stakes with a length of string long enough to cross the garden just once. Seeded rows can be labeled with less sturdy stakes to reduce cost. **TRY IT!!!**

When to 'dig in'...

"As soon as the soil can be worked" . . .

When is the soil workable in your garden?

A light, sandy, well-drained soil may be workable and crumbly even the next day after a spring rain, while a heavy, clay soil may not be ready for spading or roto-tilling for several days or even for a two-week wait.

BEWARE! Working wet, clay soil may give you a garden of brick-hard chunks.

If spring fever gets you while the soil is still cold, choose the vegetable seeds that can live with cool soil. Don't rush Mother Nature, because seeds that love warm soil may rot in cold, wet soil. Check page 5 for Early Spring Vegetables.

You'll have more fun planting your garden if tools are sharp and clean - makes work easier too! A hoe, spade, garden rake, measuring stick, heavy string and stakes are needed for planting.

Aerate and warm the soil, break-up soil clods, and kill early weeds by spading or roto-tilling when soil is dry enough to stir.

Find your garden map or sketch one now.

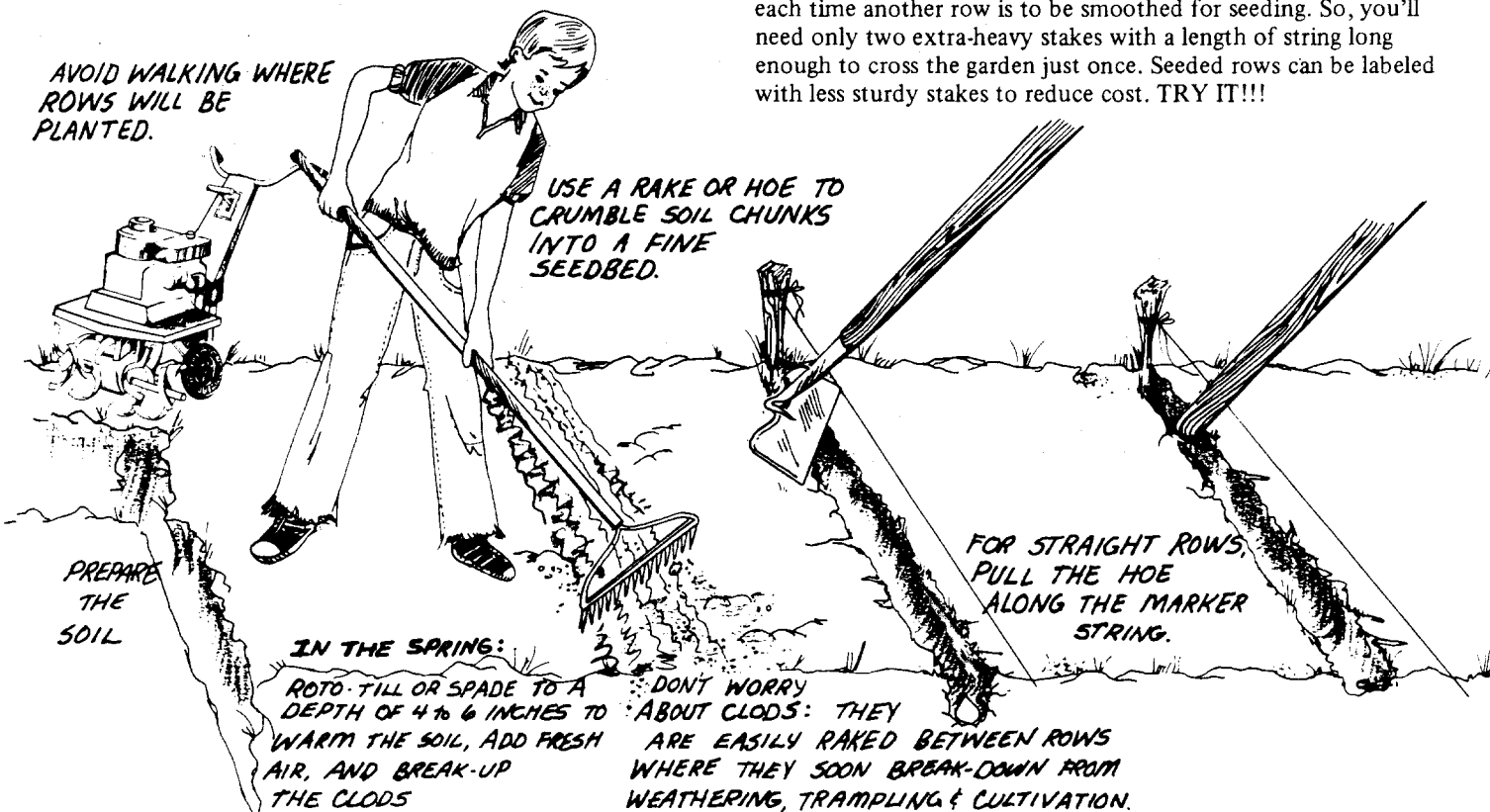




Photo courtesy of Macmillan Co., Principles of Horticulture.

Sowing Seeds

For small seed, make a planting furrow with the tip of a hoe handle drawn along the marker string. For large seeds and deeper planting, use the blade of a hoe to dig the furrow. It is usually best to mark out one row at a time and then sow the seed. Next, cover the seed immediately to prevent the soil in the furrow from drying out.

Large seeds can be dropped one by one into an open furrow. Small seeds may be sown directly from the packet by gently tapping the open envelope as you move down the row, or, by taking a pinch of seed and sprinkling it thinly in the furrow.

Cover seed with moist soil and then gently tamp with a rake, a hoe, or "pat" it with your hands. Tamping can help prevent the soil from drying out. Seeds get a head start at growing by keeping in touch with moist soil.

Should I Water After Planting?

Winter snows or spring rains usually replenish soil moisture to help the vegetable seeds planted in April and May get up and grow. Seeds planted in dry soil may need hand watering or a rain shower to sprout. Whether you hand water or the rain falls from the sky, a hard crust may form on the soil surface as it dries. This soil crust is best gently crumbled by hand, or tamped with a rake as soon as possible to let the small-seeded vegetables poke through for sun.

When 4 to 10 seeds are spread in a short furrow, they are called "hills". These hills are not actually mounds of soil. Cucumbers, melons and squash are often planted in hills 6 to 10 feet apart. Remember to thin out the weakest seedlings.

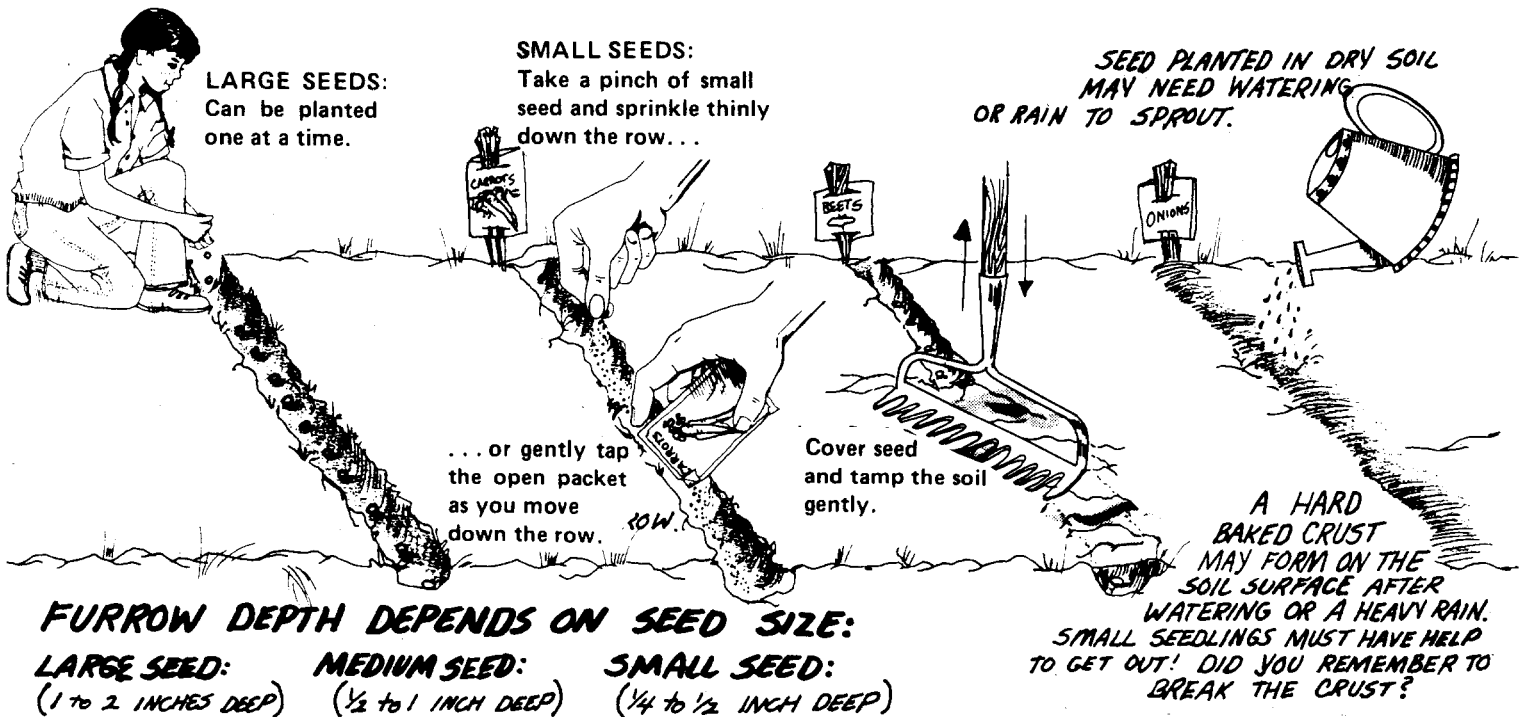
How Thick Should Seed Be Planted?

Grandma always said, "Plant 'em thick and thin 'em quick." She would plant her carrot seed fairly thick since many seedlings together help each other push through the soil. After the carrots came up, Grandma thinned the seedlings as she weeded the rows in early June. (And it works for beets, lettuce, onions and parsnips too!) Check the seed packet directions.

How We Prepare The Seedbed

After spading or roto-tilling, use a garden rake to smooth and level the soil along that straight marker string.

- * Check the seed packet for the suggested planting depth of the various vegetables.
- * In wet weather or on heavy, clay soil, plant shallow.
- * If soil is light and sandy and dry weather prevails, plant seeds deeper than recommended to help germination.



Planting Transplanting

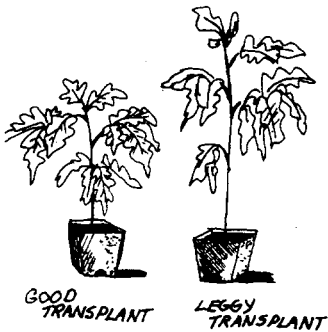
Transplanting is the moving of a plant from one place to another. If you take the plants that you have thinned out and set them to grow in another place, you are transplanting them.

Transplants can be started indoors at home, or they can be purchased. In many cases, it is easier and cheaper to buy transplants. Be sure to buy stocky, well-grown plants, not tall, spindly ones. If you grow transplants yourself, (1) you can grow the variety you want and (2) they will be on hand when you want them.

Transplant on a cloudy day, after a rain...

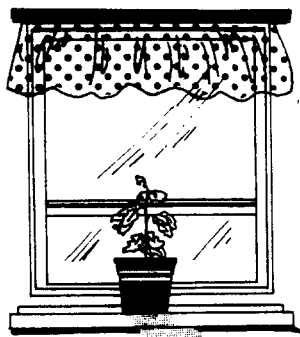


You can grow transplants at home if you know what the plants need. Plants should be grown in direct sunlight (10-12 hours per day) and on a cool windowsill or porch (min. 55°F. at night). Home-grown transplants are often tall, spindly and weak because they are started too early, grown too warm, over-watered and given too little light.

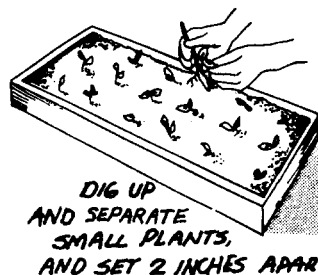


BEGIN INDOORS

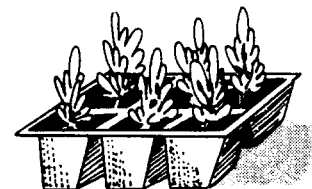
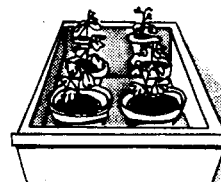
Plant seeds in a shallow pan or in a horizontally-cut milk carton. (1) Punch drain holes in the bottom. (2) Fill planting tray 3/4 full of well-drained soil. (3) Sow seeds thinly and cover with soil or sand 1/8 to 1/4 inch deep and water thoroughly. (4) Cover the planted tray with newspaper and place in a warm room (70-75°F.). (5) Peek in on them each day to see emerging seedlings. (6) **IMPORTANT:** As soon as seedlings start pushing up the soil, remove the newspaper and place the tray in a well-lighted window. Don't over-water.



After the seedlings have developed one pair of true leaves, transplant them to containers filled with well-drained soil.



DIG UP AND SEPARATE SMALL PLANTS, AND SET 2 INCHES APART.

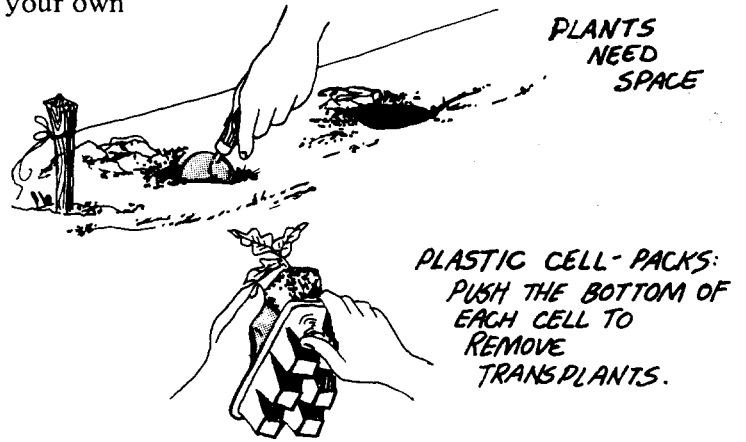


TRAYS PROTECT FURNITURE & MAKE WATERING EASIER. ALL TYPES OF 'SOIL' BLOCKS AND SEED TRAYS CAN BE USED.

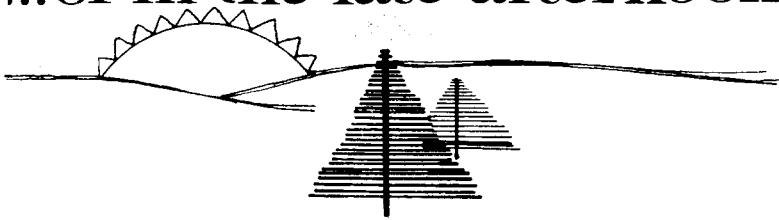
For Home-Grown Plants

- * Start cabbage, peppers and broccoli no earlier than April 1st; sow tomato seed about April 20th for ideal transplants.
- * Most garden soils are too heavy for growing good transplants, so, we buy a well-drained soil mixture for growing our transplants.

"HARDENING THEM OFF" - is helping plants to adjust to the out-of-doors. Whether you bought your plants or started your own plants, it takes about a week to get them adjusted to the outdoors. Slow down their growth by watering your plants less often. Set them outside for a few hours each day for 4-5 days before planting. Water the plants several hours before planting in the garden, so that the soil sticks to the roots when the plants are removed from the container. Plant weak or leggy transplants deeply in the garden to reduce wind damage.



...or in the late afternoon.



DON'T FORGET that tomatoes, cabbage or peppers need room to grow (see page 19 for Spacing). Dig holes 3-4 inches deeper than the depth of the root ball on the transplant. In this way, fine, mellow soil can be added beneath the plant and you will be able to lower the plants 1½-2 inches below ground level where they are protected from drying winds. Extra moisture from brief rain showers can fill the basin around each plant.

PROTECTION FOR EMERGING SEEDLINGS AND TRANSPLANTS can be provided by hot-caps or with a new material called, Reemay®, that is being marketed by nurseries and some hardware stores. Reemay® is a white, woven, synthetic fabric material that is porous and allows air and water to pass through. It offers wind and some frost protection for both emerging seedlings and transplants. It is laid down over the row and may remain directly on the plants for weeks without harm to plants since it allows light to pass through, is very lightweight, does not "cook" plants by heat-build-up as with plastic and may be easily anchored because it resists wind movement.

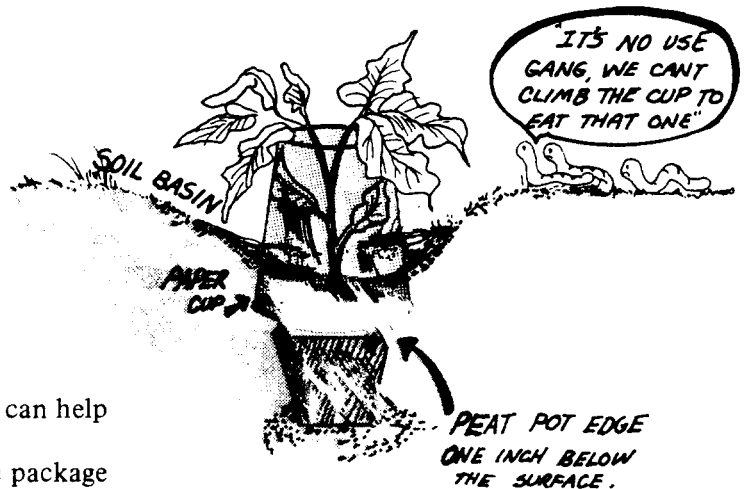
When peat pots are used for transplanting, they can be planted pot and all to lessen the transplanting shock. Make sure the peat-pot is well covered with soil (at least one inch deep). If the edge of the pot is exposed, transplants may dry out. Plants grown in peat type containers result in practically no transplant shock. Take care to prevent root drying before planting.

NOW THAT THEY'RE IN. Firm the soil around the root ball and water to settle the soil and remove air pockets.



PROTECT TRANSPLANTS from cutworms immediately after planting. Use collars made from paper cups, milk cartons, or metal cans with the bottoms cut out. Carefully slip the collar down over each plant and into the soil to a depth of about 1 inch.

STARTER SOLUTIONS: A starter solution of fertilizer can help young plants get off to a fast start. Buy a dry (water soluble) fertilizer that can be dissolved in water. Follow the package directions.

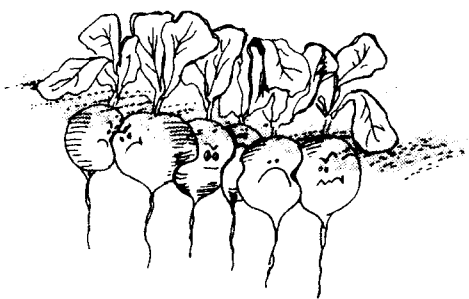


Room to Grow

Plant 'em Thick and Thin 'em Quick

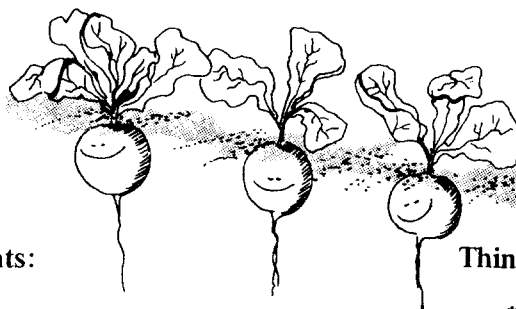
Plant seeds thickly enough to get a good stand. When seedlings peek through the soil, remember, crowded plants do not grow well. They rob each other of space, food, water, and sun, just like weeds. You will get more pounds of tender vegetables if you give young plants some elbow room.

WHY DO VEGETABLES NEED THINNING?



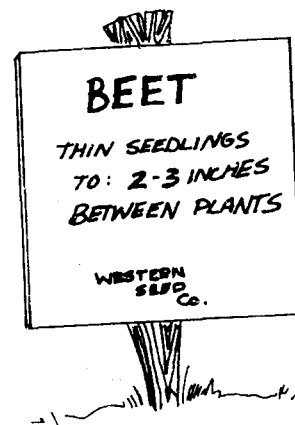
Crowded Plants:

- * Compete with each other for growing space, food, water and sunlight.
- * Cause rough, gnarled, hard-to-peel roots.
- * Give smaller fruits, pods and roots.

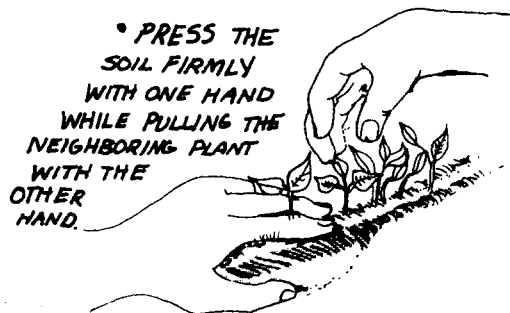


Thinned Plants:

- * Give large, smooth, tender, roots, leaves and fruits.



And This Is How It's Done:



PRESS THE SOIL FIRMLY WITH ONE HAND WHILE PULLING THE NEIGHBORING PLANT WITH THE OTHER HAND.

- * The best time to "thin-out" vegetables is when you are weeding the rows for the first time. It saves extra back-bending when both weeding and thinning can be done at the same time.

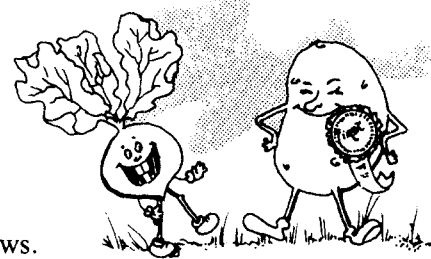
- * Pull out the smaller plants when they are 1 to 2 inches tall and when the soil is moist. Be careful not to damage the roots of the chosen few that remain in the row. Hold the soil firmly with one hand while pulling the neighboring plant with the other hand. If the soil is very dry, give the plants a gentle and thorough watering after thinning to perk them up.

Press the soil firmly with one hand while pulling the neighboring plant with the other hand.

If you are careful, you can transplant strong seedlings to fill in open spaces in the rows.

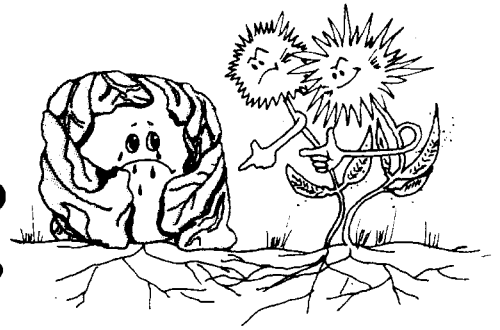
Small seeded vegetables are best thinned by hand, while large seeded kinds, such as corn, beans, peas and vine crops may be carefully thinned with a hoe.

The thinnings are delicious in soups, sandwiches and stews.



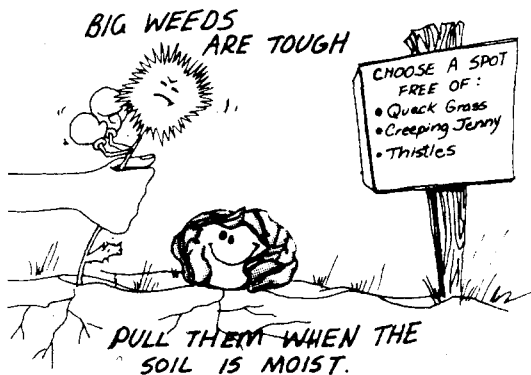
Away with Weeds

Weeds Rob Vegetables



Vegetables cannot compete with fast-growing weeds for light, soil moisture and nutrients. A small weed-free garden can out-produce a large unkempt one, both in quantity and quality of vegetables. If you are not able to keep ahead of the weeds in a large garden, try gardening on a smaller plot (one that you can weed in a short time).

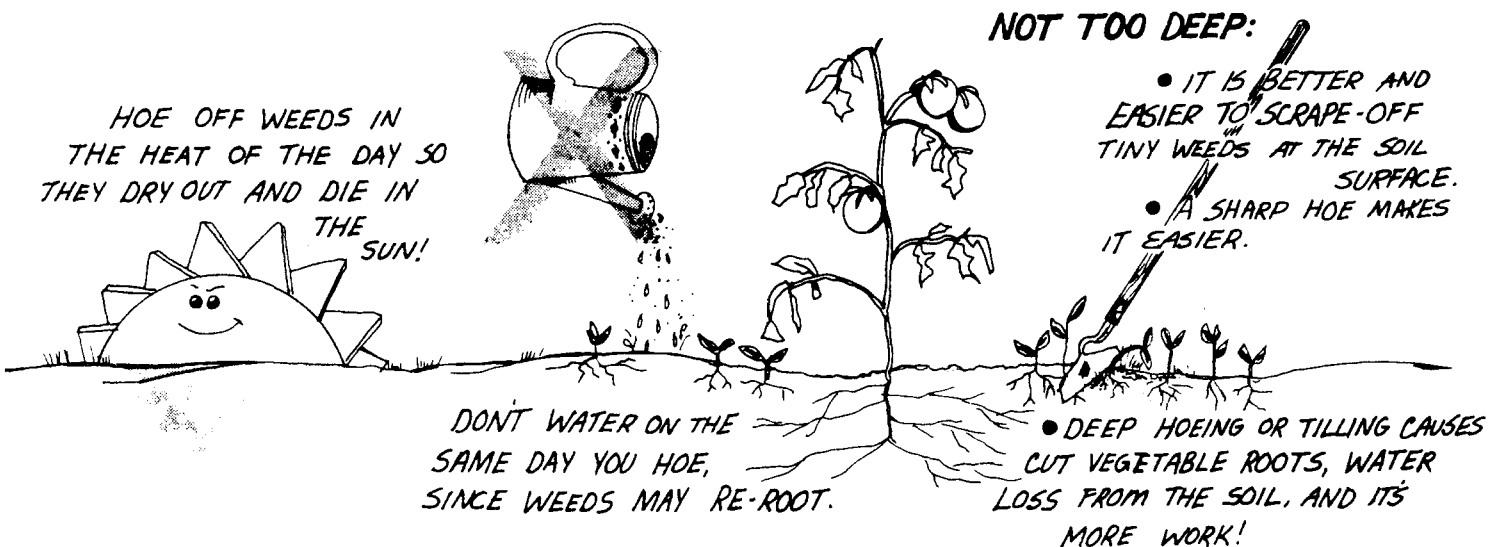
The time to stop these small seedling weeds (purslane, pigweed or pigeongrass) is just after they come up (usually in early June after the night-time temperatures reach 60-70°F.). They can be seen early in the morning looking eastward at the soil. The weeds show a greenish or reddish cast. THAT'S THE STAGE TO GET 'EM.



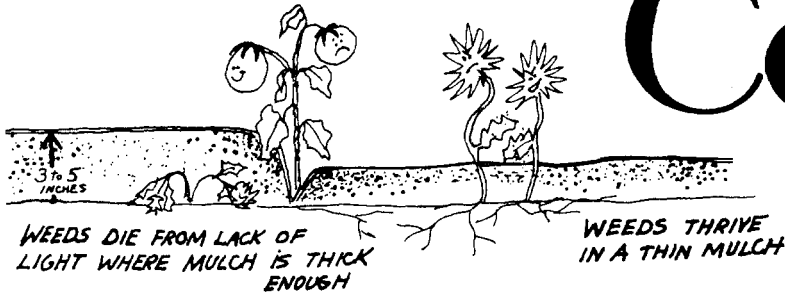
Once weeds gain a foothold, control means hard work. Shallow roto-tilling or hoeing a day or two after a rain is an excellent time to stop weeds easily. Pulling or hoeing a few weeds each time you harvest vegetables can help you to keep ahead of the weeds and maintain a weed-free garden all summer long. Don't let a few late season weeds spread thousands of seeds over your soil. You'll just have to struggle with them the next year.

You can enjoy weeding early in the morning when the temperatures are cool. Wear comfortable clothing and use clean, sharp tools. Remember, weathered or checked hoe handles can cause blisters on your hands.

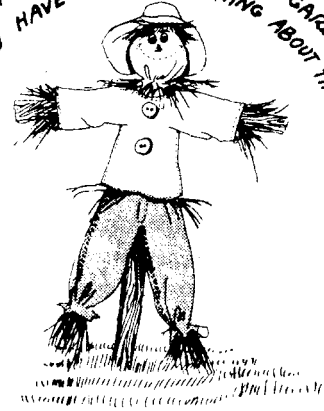
Chemical herbicides recommended for weed control for commercial vegetable growing are not necessarily feasible for use in small home gardens. Most are not packaged for homeowner uses. Many selective herbicides are practical only on large fields of one kind of vegetable. A chemical that is safe for one vegetable may severely injure or destroy another kind that is nearby or be injured by soil residues the next season. The hoe and roto-tiller are recommended for weed control in small gardens.



Mulches For Weed Control



YOU CAN'T SCARE WEEDS OUT OF GARDENS:
YOU HAVE TO DO SOMETHING ABOUT THEM!



Mulches that Decay:

Thick layers of organic materials, like grass clippings, compost, leaves, straw or hay tucked in closely to growing vegetables can: (1) smother weeds and reduce the need for cultivation, (2) conserve soil moisture, (3) keep the soil cooler in hot weather and (4) reduce the spread of diseases from rain splashed soil on foliage. These organic mulches should not be applied to the soil until it has been thoroughly warmed (at least mid-June). Plastic mulches can be applied much earlier.



DRIED GRASS CLIPPINGS ARE HANDY AND CHEAP FOR MULCHING.

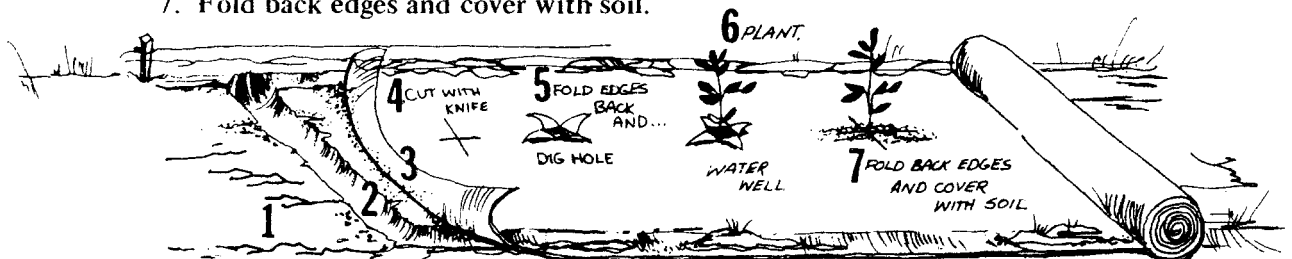
CURING OF CLIPPINGS BEFORE USING THEM FOR MULCH, PREVENTS THEM FROM PACKING, FERMENTING, AND SMELLING.

Putting Down the Plastic

Clear plastic mulch helps warm the soil for warm season vegetables (melons, squash or tomatoes), and controls most common weeds except purslane, crabgrass and quackgrass. All plastic mulches should be picked up before plowing the garden each fall. They do not rot when plowed and can cause only misery if they are turned under. Plastic sheets, 48 to 50 inches wide with a thickness of 2 or 4 mils (1 mil = 1/1000 inch) may be used as a mulch. Black plastic does not warm the soil as rapidly as clear plastic. Plastic is usually available from hardware stores or lumberyards. Large plastic trash bags can also be used.

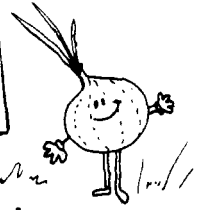
So, Here We Go:

1. Prepare a mellow seedbed. (To help keep the row straight, work the area between two marker strings spaced four feet apart.)
2. Dig a trench 4 to 5 inches deep with a hoe along both sides and ends where the plastic will be laid.
3. Roll out plastic evenly, burying the edges.
4. Cut with knife.
5. Fold edges back and dig hole.
6. Plant and water well.
7. Fold back edges and cover with soil.



Choose The Best Varieties

SOME TRUSTY RELIABLES:
OLD & NEW



Total success in your garden can be affected by the vegetable varieties you buy and plant. Choose varieties that are: *Liked by your family, *Resistant to diseases, *Able to produce well in a small space, and *Able to ripen before frost in the fall

A FEW TRUSTY VARIETIES

Asparagus * 'Mary Washington' does well.

Beans * 'Topcrop', 'Improved Tendergreen' are good, green, podded varieties. 'Pencil Pod Black Wax' and 'Topnotch Golden Wax' are high quality wax types.

Beets * Any variety will do; 'Detroit Dark Red' or 'Ruby Queen' are good choices.

Broccoli * The newer varieties yield well; try 'Premium Crop' or 'Green Duke'.

Cabbage * 'Stonehead', 'Golden Acre YR' or 'Copenhagen Market' for early and 'Danish Ballhead' for late.

Carrots * 'Nantes' and 'Chantenay' are standards.

Chard, Swiss * For your health, 'Lucullus' or 'Rhubarb Chard' with bright, red stocks.

Corn, Sweet * 'Earli-King' for early; 'Morning Sun,' mid-season; and 'Honeycomb', 'Sweetie' and 'How Sweet It Is' for late flavor delight.

Cucumbers * Pickling: 'Spartan Dawn,' 'Improved Long Green' or 'Saladin' and for slicing: 'Marketer' or 'Straight Eight.'

Lettuce * Old reliables are still favorites, 'Black Seeded Simpson' and 'Grand Rapids'.

Muskmelon * Short season varieties are needed most seasons; try 'Minnesota Midget', 'Earlisweet' 'Sweet-n Early' or 'Gold Star Hybrid'.

Onions * Most do well in the absence of onion maggots; 'Southport White Globe', 'Early Yellow Globe' or 'Sweet Sandwich' varieties are good keepers.

Peas * Early, 'Little Marvel,' 'Knight', 'Maestro'; mid-season 'Green Arrow', 'Lincoln' or 'Wando'; Snap Peas - 'Sugar Snap'

Peppers * 'Early Prolific,' 'Gypsy' or 'Lady Bell.'

Potatoes * Early red, 'Red Norland;' a good Russet variety is 'Norgold Russet.' Both are scab resistant.

Pumpkins * Small vine, early 'Spirit'; 'Autumn Gold' and 'Cheyenne Bush' for small spaces.

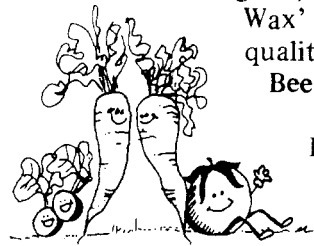
Radishes * Try 'Champion' or 'Cherry Belle'.

Squash * Summer Squash* 'Aristocrat' (Zucchini type); or 'Butterstick'.

Winter Squash* 'Buttercup', 'Gold Nugget,' 'Emerald' or 'Sweet Mama'.

Tomatoes * 'Sheyenne,' 'Cannonball,' 'Quick Pick' or 'Wayahead'.

Watermelon * 'New Hampshire Midget,' 'Sugar Baby,' 'Yellow Baby' or 'Sweet Favorite'.



HINTS ABOUT SEED:

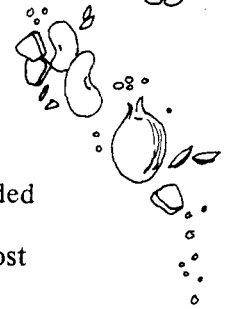
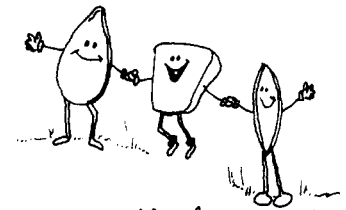
- * Buy fresh seed each year...it can make the difference.
- * Use high quality seeds of recommended varieties.
- * Gardeners should not save seed from hybrid vegetables, because they do not reproduce the same uniform quality as the original hybrid.

Most vegetable varieties found in local stores and seed racks are fine in Midwest climates. If you live in northern areas, you would be wise in choosing short-season varieties of tomatoes, sweet corn, peppers and vine crops to insure maturity ahead of killing frosts.

Hybrid vegetable seeds are expensive, but yield abundant, high quality produce.

HOW TO FIND THE VARIETIES YOU WANT

- * Check local seed racks.
- * Send for free seed catalogs (see p. 30).
- * Stop at your County Extension Office for a list of varieties.



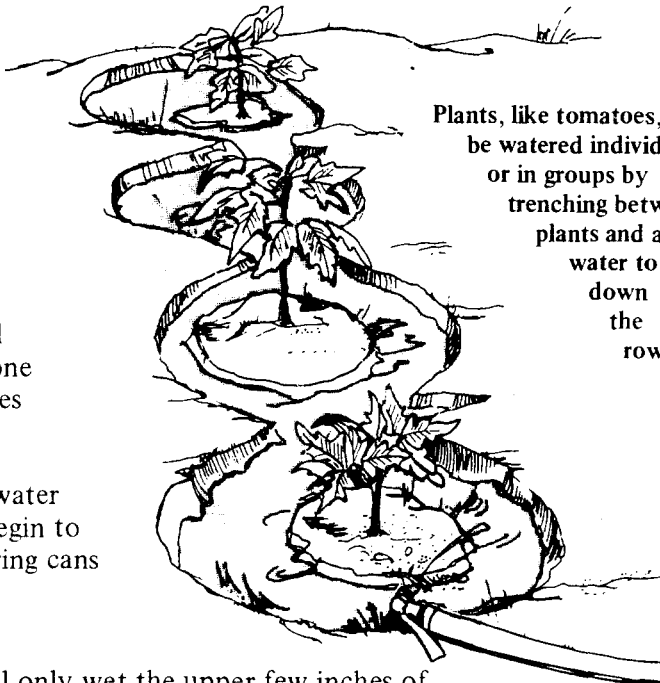
Gardening With Water...

Water is Important

During the first two weeks of growth, plants are becoming established and must have water to build their root systems. Later when flowers and tasty fruits are forming, plants again must have enough water to set a good crop.

Although rainfall is our best source of moisture, there usually are some dry periods when you will need to water your garden. During dry periods, one thorough watering each week of one to two inches of moisture (65 to 130 gallons per 100 sq. ft.) is usually enough for most soils. The soil should be wetted to a depth of 6-12 inches each time you water and not watered again until the top few inches begin to dry out. Use a sprinkler nozzle on hoses or watering cans so the soil isn't washed away.

If you water for a brief period each day, you will only wet the upper few inches of soil. Light watering, even though you water often, should be avoided since it causes roots to grow too close to the soil surface. A sudden hot spell could severely damage your garden plants if you then forget to water.



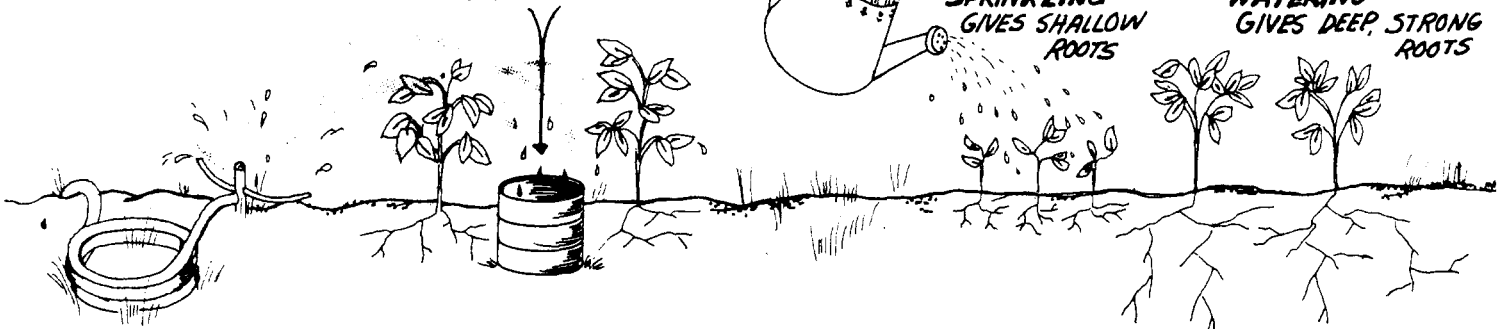
Plants, like tomatoes, can be watered individually or in groups by trenching between plants and allowing water to flow down the row.

A CAN SET BETWEEN THE GARDEN ROWS, WILL HELP YOU MEASURE THE WATER THAT FALLS FROM THE SPRINKLER.



SHALLOW SPRINKLING GIVES SHALLOW ROOTS

THOROUGH WATERING GIVES DEEP, STRONG ROOTS



Any watering practice that wets the foliage, increases disease damage, especially if foliage remains wet overnight. If you use sprinklers, water the garden in the morning or early afternoon so that foliage will dry before nightfall.

...and without

HOW CAN A NON-WATERED GARDEN SUCCEED?

- * Good soil fertility,
- * Protection from drying winds,
- * Early weed control,
- * Lack of tree root competition,
- * Proper distances between rows, and
- * Proper plant thinning.

ARE ALL NECESSARY FOR SUCCESSFUL DRYLAND (NON-WATERED) GARDENING

In the non-irrigated garden, be careful to give each plant plenty of space. Thick planting, without the later necessary thinning is often responsible for low yields. The extra plants are just as harmful as other weeds.

Wise handling of garden soil to help it hold rain water is often a better and cheaper plan than watering it. Here are two things that you do to hold water in the soil where plants can get it. ***KEEP A GOOD SUPPLY OF WELL-ROTTED MANURE OR COMPOST IN THE SOIL—THIS WILL HOLD WATER.** ***KEEP DOWN THE WEEDS—DON'T LET THEM EVEN GET A START OR THEY WILL USE WATER THAT SHOULD GO TO THE CROP PLANTS.**

Give 'em Space:

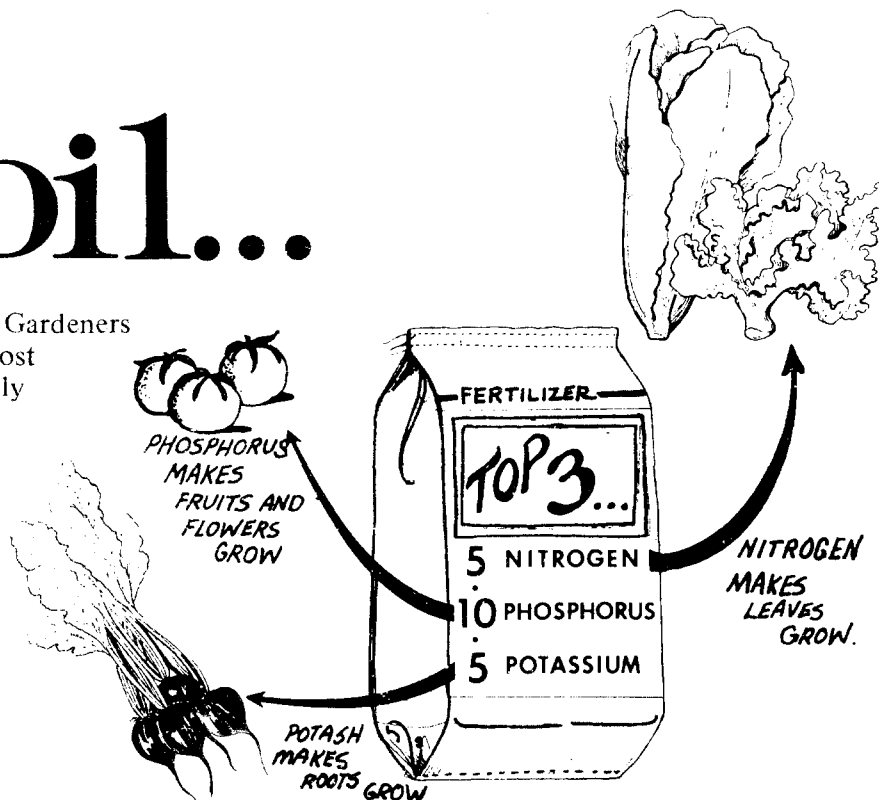
PLANT IN FIELD	VEGETABLE VARIETIES	SEED IN HOTBED	DISTANCE BETWEEN ROWS		DISTANCE BETWEEN PLANTS	
			English	Metric	English	Metric
HARDY VEGETABLES (Tolerate freezing temp.): Sow seed or transplant hardened plants as early as ground is ready to work well in spring. (Average about April 20 for 2/3 of state.)	Asparagus		4 ft.	122 cm	24 in.	61 cm
	Broccoli	Apr. 1	3 ft.	91 cm	18 in.	46 cm
	Cabbage (early)	Apr. 1	3 ft.	91 cm	18 in.	46 cm
	Cabbage (late)		3 ft.	91 cm	18-24 in.	46-61 cm
	Onions (seed)		1½ ft.	46 cm	2 in.	5 cm
	Onions (transplanting)	Apr. 1	1½ ft.	46 cm	4 in.	10 cm
	Peas (May 1-10)		2 ft.	61 cm	2 in.	5 cm
	Radishes		1½ ft.	46 cm	1 in.	3 cm
	Rhubarb		5 ft.	152 cm	48 in.	122 cm
	Rutabaga		2 ft.	61 cm	6 in.	91 cm
Spinach (May 1)		2 ft.	61 cm	4 in.	10 cm	
HALF HARDY VEGETABLES (Will tolerate light frosts): Sow seed or transplant hardened plants a week or two before average date of last killing frost in your area. (Average about May 10 for 2/3 of state.)	Beets		2 ft.	61 cm	2 in.	5 cm
	Carrots		2 ft.	61 cm	2 in.	5 cm
	Cauliflower	Apr. 1	3 ft.	91 cm	18 in.	46 cm
	Lettuce (leaf)		2 ft.	61 cm	8 in.	20 cm
	Lettuce (head) (transplanting)	Mar. 15	2 ft.	61 cm	15 in.	38 cm
	Parsnips		2 ft.	61 cm	4 in.	10 cm
	Potatoes		3 ft.	91 cm	12 in.	30 cm
	Swiss Chard		2 ft.	61 cm	6 in.	91 cm
TENDER VEGETABLES: Sow seed or transplant plants when soil is warm and after average date or danger of last killing frost in your area. (Average about May 25 for 2/3 of state.)	Beans (wax and green)		2 ft.	61 cm	4 in.	10 cm
	Beans (dry and field)		2 ft.	61 cm	4 in.	10 cm
	Beans (lima)		2 ft.	61 cm	4 in.	10 cm
	Cucumbers		5 ft.	152 cm	18 in.	46 cm.
	Muskmelons		8 ft.	244 cm	24 in.	60 cm.
	Peppers	Apr. 1	3 ft.	91 cm	24 in.	60 cm.
	Popcorn (May 15-20)		3 ft.	91 cm	12 in.	30 cm
	Pumpkins		10 ft.	305 cm	24 in.	61 cm
	Squash (summer)		3 ft.	91 cm	24 in.	61 cm
	Squash (winter)		10 ft.	305 cm	24 in.	61 cm
	Sweet Corn (May 10-20)		3 ft.	91 cm	12 in.	30 cm
	Tomatoes	Apr. 20	5 ft.	152 cm	36 in.	122 cm
	Watermelons		8 ft.	244 cm	24 in.	60 cm.

Feed the Soil...

Soil fertility in the home garden is important. Gardeners can use organic or inorganic plant foods to boost vegetable yields. Fertilizers (plant foods) supply vegetables with the three most important nutrients: Nitrogen

Phosphorus
Potassium.

The label tells how much of each nutrient is in the fertilizer.



1st: Nitrogen

5%

2nd: Phosphorus

10%

3rd: Potassium

5%

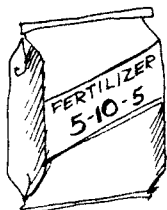
Fertilizers may be either complete or incomplete. Complete fertilizers contain the three primary plant nutrients—nitrogen, phosphorus and potassium. Incomplete fertilizers lack one or more of the primary plant nutrients.

There are many fertilizer analyses and brands available today. Fertilizers commonly used on vegetable gardens include: 5-10-5, 5-10-10, 18-24-6, plus other combinations.

Nitrogen must not be overused with vegetables such as tomatoes or excessive vegetative growth will result at the expense of fruit production. Lawn fertilizers, for the most part, are too high in nitrogen for general garden use (examples: 33-0-0 or 20-10-10).

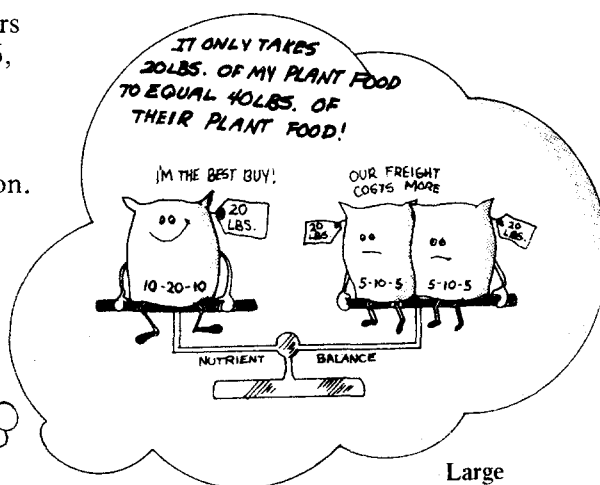


"FRANKLY, I DON'T KNOW WHAT THE NUMBERS MEAN UNLESS ITS THE ODDS ON THE WEEDS WINNING!"



THE 3 NUMBERS STAND FOR THE
% NITROGEN
% PHOSPHORUS
% POTASH
IN THE FERTILIZER.

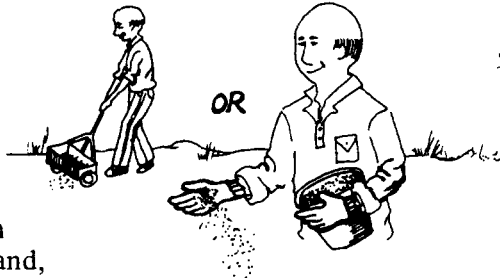
Don't use a "weed-and-feed" type fertilizer in or near your garden. The weed killers will injure your vegetables.



Large bags of dry fertilizer with high analysis (bigger numbers on the bag) give you more for your money.

Spreading Fertilizers:

In the fall or in the spring before working the soil, measure out the correct amount and spread the fertilizer evenly over the ground.



You can toss it from a pail by hand, use a spreader or just dribble dry plant food in furrows two inches deep. Furrows should be located on both sides - three inches away from the row. Use 1 to 2 pounds of fertilizer for 100' of row. Be sure to wear gloves to protect your skin from irritating chemicals. Always follow the directions on the label for rate of application of all fertilizers.

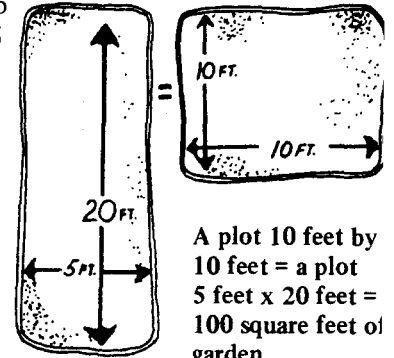
How Much To Use:

Use 1 lb. 15-30-15 for every 100 square feet or 1 lb. 18-24-6 or 2 lbs. 5-10-5

Add the correct amount. Too much will kill the plants.



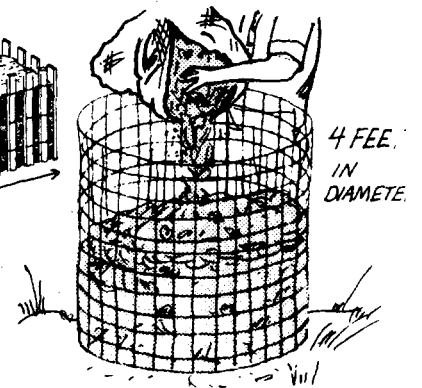
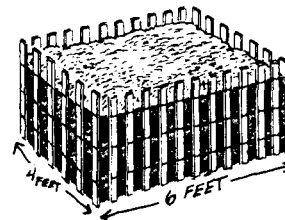
2 cups = 1 lb.
4 cups = 2 lbs.
of fertilizer



A plot 10 feet by 10 feet = a plot 5 feet x 20 feet = 100 square feet of garden

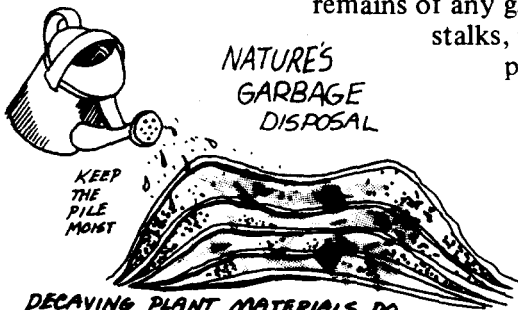
Compost: To Build The Soil

Organic matter comes from living things, like straw, leaves, grass clippings or animal manures which will improve the soil and add small amounts of plant food. So, large quantities of organic matter (about 2-3-2 analysis) are needed to give as much plant food as high analysis inorganic fertilizers (from rocks, minerals or petroleum).



IN AN OUT-OF-THE-WAY SPOT IN YOUR BACK YARD

You can make compost simply by collecting the remains of any garden vegetables (old lettuce plants, corn stalks, pea vines, etc.) leaves, straw, grass clippings, vegetable peelings and animal droppings in a pile.



DECAYING PLANT MATERIALS DO NOT GIVE OFF BAD ODORS WHEN PROPERLY COVERED WITH A THIN COAT OF SOIL AND NOT SOGGY.

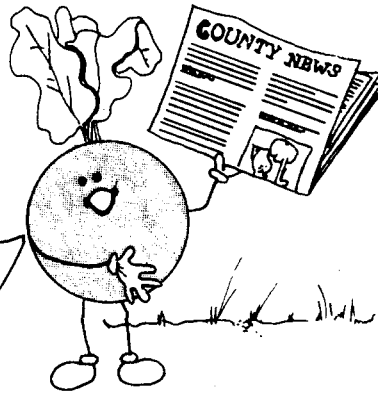
LAYER YOUR COMPOST PILE - Begin with 6 to 12 inches of organic matter at the bottom. The pile can easily be enclosed using wire-mesh, snowfence, or cement blocks. Compost should be moist, not wet!!! This means you should check your compost pile every 2 to 3 weeks for moisture. Compost should feel moist but not dripping when a handful is squeezed. Cover the organic matter with 1 inch of soil and gently moisten the pile if it is dry.

Keep adding layers by alternating organic matter and soil until the pile is 3 to 4 feet deep and covered with 1 inch of soil.

Watering is easier if the sides are higher than the center of the pile. When the organic matter (compost) has decomposed, (in 3-12 months) spread evenly over the garden.

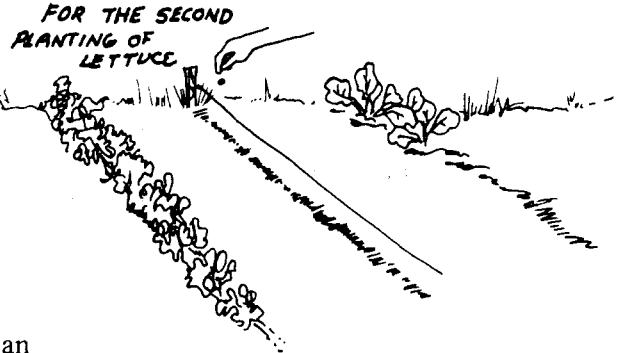
TO HURRY THE DECAY of plant remains:
* Turn the compost pile about once each month during the season, add water if needed

- * Add barnyard manure.
- * Add a high-nitrogen, complete fertilizer.



SUCCESSIVE PLANTINGS SPREAD OUT THE HARVEST

Some vegetables like: beets, cabbage (plants), onion sets (for table use), peas, etc. have a short harvest season. Two or three plantings of these crops, 10-14 days apart, would give a much longer harvest period.



Use the same garden space twice by **INTER-PLANTING** two different crops in the same row. Certain early vegetables, such as, lettuce, onion sets and radishes, mature faster than others. Here are a few vegetables that make good companions when planted together.

Radishes & Tomatoes - Set plants in row where radishes have been harvested.

Radishes & Peppers - Same as above.

Onion seed & Radishes - Onions are much slower starting.

Carrots & Radishes - Radishes help mark the row and break the crust.

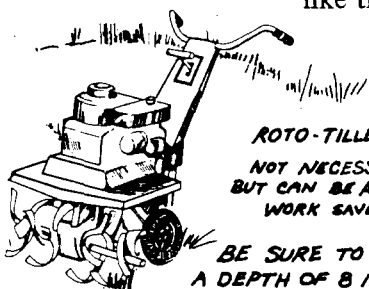
Radishes & Cabbage plants - Radishes are harvested well ahead of cabbage.

Parsnips & Radishes - Parsnips are slower.

Tools and Equipment

The right tools save time and work. They make gardening easier and more enjoyable. You need only a few tools if you choose them carefully and use them in the right way and at the right time. New tools are not necessary. You can pick up old ones cheaply at a garage sale or auction. Buy tools to fit your size. Hoes and shovels can be bought with handles of many different lengths. For us small people, we'll be able to do more work and be less tired if we use small tools.

No other tools can dig seed trenches and chop out weeds like the garden hoe. And our favorite is the onion hoe whose shallow cutting blade and shorter handle take the work out of hoeing. A steel file can help you keep your hoe sharp.

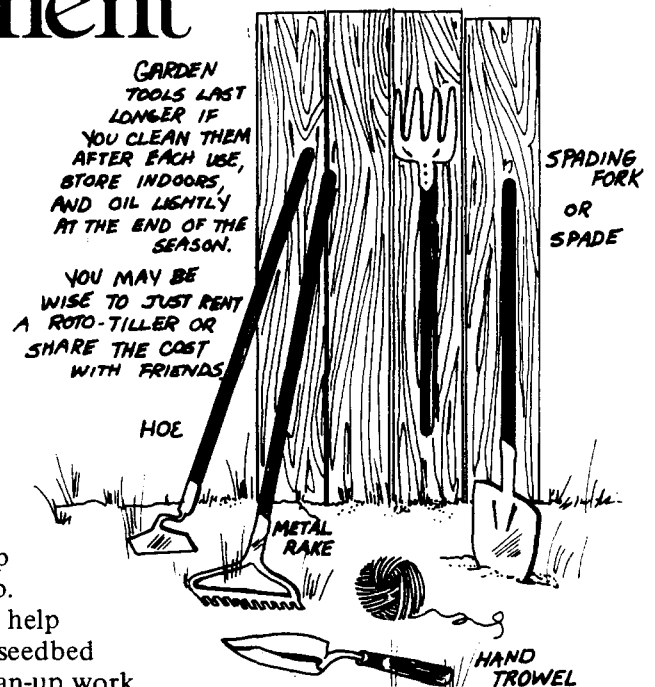


ROTO-TILLER:
NOT NECESSARY
BUT CAN BE A REAL
WORK SAVER.

BE SURE TO TILL TO
A DEPTH OF 8 INCHES
IF POSSIBLE. THIS MEANS
YOU MUST GO SLOWLY.

A steel garden rake is a help for preparing a mellow seedbed and useful for yard clean-up work.

A garden spade or shovel is usually needed for loading and spreading compost, and turning over the soil on small plots that are not tilled or plowed with a tractor.



GARDEN
TOOLS LAST
LONGER IF
YOU CLEAN THEM
AFTER EACH USE,
STORE INDOORS,
AND OIL LIGHTLY
AT THE END OF THE
SEASON.

YOU MAY BE
WISE TO JUST RENT
A ROTO-TILLER OR
SHARE THE COST
WITH FRIENDS

HOE

METAL
RAKE

SPADING
FORK
OR
SPADE

HAND
TROWEL

Garden Problem Guide

Symptoms	Possible Causes	Possible Cures
Dying young plants	Fertilizer burn	Mix fertilizer thoroughly with soil. Use less fertilizer or incorporate more evenly in soil.
	Disease (damping-off)	Overly wet soil and plants increases the problem. Don't overwater try to water in the forenoon.
Stunted plants (pale to yellow)	Low soil fertility	Add 2-3 lbs. of fertilizer for 100 sq. ft.
	Poor soil drainage	Add organic matter and improve drainage.
	Shallow or compacted soil	Plow deeper. Add organic matter.
	Insects or diseases	Identify the insect or disease and use currently recommended control measures.
Stunted plants (purplish color)	Low temperatures	Wait for warm weather; protect from frost.
	Lack of phosphorus	Add phosphorus fertilizer.
Holes in leaves	Insects	Identify the insect and use recommended control measures.
	Hail	Be thankful it was not worse. Some vegetables will recover depending upon amount of damage and stage of growth when damage occurs.
Spots, molds, darkened areas on leaves and stems	Disease	Identify disease, use resistant varieties and recommended control measures.
	Fertilizer burn	Wash plants if fertilizer comes in contact with leaves. Keep fertilizer off plants.
Wilting plants	Dry soil	Apply water if possible.
	Excess water in soil	Dig ditches to drain surface water away.
	Disease	Use resistant varieties if possible or recommended control measures.
Weak, spindly plants	Too much shade	Move garden to sunny location.
	Too much water	Make ditches.
	Plants too thick	Thin your plants.
Failure to set fruit	Too much nitrogen	Avoid excess nitrogen fertilization.
	High temperatures	Fruit set will improve as weather cools.
	Low temperatures	Protect from freezing.
Tomato leaf curl	Insects	Identify the insect and use controls.
	Stress	May not damage plants severely. Protect fruits from sunscald.
	Disease	Identify the disease and use controls.
Dry, brown to black rot on blossom-end of tomato	Extremely dry weather	Maintain an even watering level. (1-2" of water per week.)
	Cool weather during blooming	Choose a different variety of tomatoes next summer.
Misshapen tomatoes (catfacing)	2,4-D weed killer	Don't use sprayer that has previously applied 2,4-D. Don't allow spray to drift on garden. Plants will recover; fruiting delay of 2-3 weeks depending upon damage.
	Virus disease	Remove infected plants to prevent spreading. Control insects that spread the disease.
Misshapen carrots, beets, etc.	Plants too close together	Thin plants as early as possible.
	Neighbors' kids	Share melons in exchange for garden work.
Disappearing watermelons		

The a,b,c gang The Vegetable Crops

ASPARAGUS

Gardeners learn to take special notice of the signs of the coming gardening season - the midnight rustling cry of geese winging northward, the chirp-cheree of robins, the song of meadowlarks, the swollen buds of Golden Willows and Lilacs. Best of all is the early morning sight of dew-sparkling asparagus spears arching outward from their permanent home in the garden and along riverbanks.

Cutting or snapping off 6 to 8 inch tender spears (quickly bending each spear over until it snaps free at the base), gives an extra special fresh taste when thinly sliced raw for salads or steamed 3-7 minutes and dabbed with melting butter.

Harvesting the young spears from about mid-May until July 4th will give our families a very nutritious late spring-early summer vegetable rich in vitamins A, B and C until other green crops are ready for the table.

- * **Recommended Varieties:** 'Mary Washington'.
- * **Where to Plant:** Asparagus is a long-lasting perennial vegetable and should be planted at one end or to the side of your garden since this asparagus bed cannot be plowed each fall.
- * **Soil Preparation:** It is best to mix liberal amounts of compost or well-rotted manure with the soil to a depth of 12-15 inches at planting time for the richest annual harvests.
- * **Planting:** Plant one year old roots with the crown buds upward, 6-8 inches deep in early spring.
- * **Room to Grow:** Space roots 18 inches apart in the row when planting and 5 feet between rows.
- * **Culture:** Weed-free and grass-free asparagus beds will yield more than twice as much as an unkempt bed.
- * **Harvest:** New asparagus beds should not be harvested until the third year after planting.
(a) The harvest season lasts from about mid-May to July 4th if the bed is harvested continuously.



BUSH BEANS generally take about 50-60 days of warm temperatures to produce a crop of usable pods. They are productive, easy to grow, simple to prepare and provide a good source of vitamins A, B-complex and C.

- * **Recommended Varieties:**
Green Snap Beans: 'Topcrop', 'Provider', 'Wade', 'Improved Tendergreen' and 'Tendercrop'.

Wax Beans: 'Topnotch Golden Wax', 'Pencil Pod Black Wax', and 'Goldcrop'.

Pole Beans may solve a problem of planting in limited space by training upon a fence or trellis. 'Blue Lake' and its many strains are good varieties.

- * **Soil Preparation:** Spade or roto-till soil in spring - prepare a mellow seedbed.
- * **Days to Germination:** 6 to 10 days.
- * **Planting:** Beans are **TENDER VEGETABLES** and prefer warm soil. The early sown beans should be planted one inch deep with the later plantings two inches deep. Drop seed 2-3 inches apart in the row.
- * **Room to Grow:** Thin the plants 4 to 5 inches apart within the row with 2-3 feet between rows.
- * **Culture:** Keep weed-free throughout the growing season. Place old plants in compost pile.
- * **Harvest:** You can prolong the harvest season by (1) keeping your plants picked. They will stop bearing if mature pods are allowed to remain on the plants and (2) by making small plantings at two week intervals into June. Avoid harvesting beans when the plants are wet.

BEETS have a place in everybody's garden. They prefer cool temperatures, but produce well under a wide range of weather conditions with seldom ever any disease or insect problems. Beets are best grown rapidly and used when young and tender for best quality and food value. We find that they are even delicious when old and over-sized when carefully prepared.

- * **Recommended Varieties:** 'Ruby Queen', 'Detroit Dark Red', 'Red Ace' and 'Sweet Heart'.
- * **Soil Preparation:** Prepare a fine, mellow seedbed for shallow planting and quick growth.
- * **Days to Germination:** 7-10 days.
- * **Planting:** Beets are **HALF-HARDY VEGETABLES**. Space rows two feet apart. Sow seed 1/2 inch deep. It is necessary to help seedlings get up if the soil forms a crust following rains. Use a rake or your fingers to gently break or remove the soil crust. Thin seedlings two inches apart in the row.
- * **Culture:** Weeds must be removed. Apply water if soil is dry. Be sure to thin beets - too many beets are as bad as weeds.
- * **Harvest:** Carefully pull roots with tops attached. Cut tops 1/2 to 1 inch above the root. Use the beet greens.

They are one of the most vitamin rich garden greens when properly prepared. Rinse greens in cool water, serve fresh in salads or steam 4-7 minutes in a closed kettle with small amount of water. Serve hot, touched with butter.

- * Preparing the Beet Roots: Do not cut the crown or tap root before cooking. Steam whole beets until tender. Cool, peel, slice or dice, fry lightly in butter and serve.



BROCCOLI, far easier to grow than cauliflower and richer in vitamins A and C, is a delight when home-grown. It can be harvested over a fairly long season and is never better than when taken directly from garden to kitchen.

- * **Recommended Varieties:** 'Premium Crop' and 'Green Duke'
- * **Soil Preparation:** Spade or roto-till the garden 4 to 6 inches deep before planting this **HARDY VEGETABLE**.
- * **Days to Germination:** 3 to 10 days. Days from seeding until plants are ready to transplant = 35 days.
- * **Planting:** It is best to buy transplants of this **HARDY VEGETABLE** rather than to directly seed broccoli into the garden. If you grow your own plants, sow seed about April 1st and set the hardened transplants in the garden in early May. Place plants low in a basin (2 to 4 inches deep) to protect them from drying winds and to trap extra moisture.
- * **Culture:** If you expect to grow good quality broccoli, cauliflower and cabbage over a long season, insect pests must be controlled. A safe dust or spray of Thuricide® or Dipel® will not harm people but will kill the caterpillar pests of these vegetables if the directions on the package label are followed. Don't forget to pull out all broccoli plants and compost them after you have harvested the flower heads.
- * **Harvesting:** Cut the plant's stem 3 to 4 inches below the green and unopened flower clusters. If you used a dust or spray of Thuricide® or Dipel®, you may rinse the harvested broccoli head in cool water, slice and steam until tender without having to worry about the insects floating in the kettle.

If you do not control the insects, you may immerse the broccoli heads in cool water with either 1/2 cup apple cider vinegar or 1/2 cup salt. Next, rinse the flower heads with blasts of cool water to shake loose the insects and prepare broccoli by slicing in bite size pieces and steaming until tender.

CABBAGE is excellent for cole slaw, adds flavor to shredded salads, is very tasty when boiled or added to soups and prized for sauerkraut. "Red-headed" varieties add a colorful zest to salad bowls. Except for insect problems (discussed under broc-

coli), cabbage is very easy to grow, it stores reasonably well and can provide your table with a fresh vegetable for many months.

- * **Recommended Varieties:** 'Stonehead', 'Golden Acre YR', 'Ruby Ball', and 'Market Topper'.
- * **Soil Preparation:** The garden should be thoroughly worked in the spring to warm and aerate the soil.
- * **Planting:** This **HARDY VEGETABLE** is best grown from transplants. Set plants deeply in shallow basins as with broccoli. The harvest season can be extended by planting a few plants at 10-day intervals or by planting two different maturing varieties at the same time. Space plants at 18-24 inch intervals within the row with rows spaced 3 feet apart.
- * **Culture:** Proper plant spacing and weed control are essential. Early spring planting can ensure a longer harvest well ahead of July heat. Remove old plants immediately after harvesting heads to reduce insect problems. See insect controls under Broccoli.
- * **Harvesting:** Start using your cabbage when the heads are small if you planted a dozen plants at the same time. This will help utilize the crop before heads split and insects become a serious problem.



CARROTS are a must in every garden. Two medium-sized carrots can provide enough vitamin A for the daily adult requirement. They are also a good source of vitamin C. Eat them fresh from the garden, as carrot sticks or shredded in salads. They are great sliced or cubed when cooked or added to stews.

Carrots vary by variety and come in many sizes and shapes. For heavy soils, the medium length Chantenay-Danvers types are best. At least you can pull them from the soil without them breaking off.

- * **Recommended Varieties:** 'Nantes Coreless' and 'Red Cored Chantenay'.
- * **Soil Preparation:** Prepare a fine, smooth seedbed since carrot seed is very small.
- * **Days to Germination:** 10-17 days.
- * **Planting:** Carrot seed should be planted 1/4 to 1/2 inch deep (in the moisture). Carrots must be given care if a crust forms on the soil surface before the tiny plants emerge. Break the crust gently with a rake or by hand. Space rows 2 feet apart and thin plants 2 inches apart within the rows for this **HALF-HARDY VEGETABLE**.
- * **Culture:** Control weeds throughout the summer. Carrots are seldom hampered by diseases or insects.
- * **Harvesting:** Carrots are adaptable and unequalled for supplying food over a long period of time. They can be stored in the garden until early October and then stored indoors in moist sand or in a refrigerator.

CHARD or SWISS CHARD: Bright, burgundy-red or lime green stalks and veins with large, crinkly leaves of deep green, holds rich stores of vitamins A and C with a healthful supply of iron.

Dewy-fresh and shredded for salad, steamed and buttered or enriching a homemade soup - the Swiss Chard can't be beat for giving abundant food from one of the easiest-to-grow vegetables. Swiss Chard can take our cool season and hot-dry summers, and this virtue makes it our best choice of fresh greens instead of spinach which fails in warm temperatures.

- * **Recommended Varieties:** 'Rhubarb Chard' and 'Lucullus'.
- * **Soil Preparation:** Prepare a reasonably smooth seedbed exactly the same as for beets.
- * **Days to Germination:** 7 to 10 days.
- * **Planting:** Swiss Chard seed can be directly sown in the soil of your garden a week or two before the average last date of killing frosts in your area since it is a **HALF-HARDY VEGETABLE**. Seed is sown thickly and seedlings are thinned to allow 6 inches between plants and 2 feet between rows.
- * **Culture:** If you are looking for a garden plant that needs no special fuss or muss... then Chard is the one for you. By keeping a weed-free garden and thinning out the crowded Chard seedlings, you will have a fool-proof vegetable.
- * **Harvesting:** You can harvest the young, outer leaves of each plant throughout the summer season without having to make a second planting (successive planting). If the plants get old or too large, the plants can be cut about 1½ inches to 2 inches above the plant crown, new leaves will form again to keep a supply for your kitchen and neighbors.



SWEET CORN harvest time is our favorite part of the gardening season. Corn is at its best flavor when taken directly from the plant to the stove. What a delight for most youngsters - they may not always eat their peas and beans, but seldom do they turn down that fresh, golden sweet corn glazed with a touch of sweet cream butter.

- * **Recommended Varieties:** 'Earliking', 'Morning Sun', 'Honeycomb', 'Sweetie', and 'How Sweet It Is'.
- * **Soil Preparation:** Garden soil should be worked 6-8 inches deep to warm it before seeding. Soil smoothness is not as important for sweet corn as with small seeded vegetables.
- * **Days to Germination:** 6 to 10 days in warm soil.
- * **Planting:** Sweet corn is a **TENDER VEGETABLE**. Sow seed 2 inches deep in hills 2 feet apart or drop 4-6 seeds singly per foot of row. Rows should be 30-36 inches apart. Corn is pollinated by wind so plant in small blocks of 3 to 4 rows rather than single rows. Plant two or three varieties so that it will not all ripen at once.

- * **Culture:** Weed-free corn is most productive. Thin hills to two plants and single plants to 12-14 inch spacings. Mound the soil around the base of the corn plants (hilling) when it is 12-15 inches tall, to help plants from being damaged by wind.
- * **Harvest:** Pick sweet corn when kernels reach the thick milk stage and before they become chewy. Harvest only what corn can be used at a meal if possible, since sweet corn loses its sweet flavor rapidly after picking. If you must pick corn for later use, remove husks and silk, wash in cold water to cool and then refrigerate in closed plastic bags. Even with proper handling, sweet corn can lose one-half of its sweetness after six hours of storage.

CUCUMBERS come in a wide variety of shapes and colors. The most popular types are "picklers" and "slicers". Gardeners should consider planting some of both kinds, but can use either type for both pickling and salad use if harvested at the right stage. Where space is limited, cucumbers can be grown on a trellis. Trellis grown "cukes" are straighter and more attractive than ground plants.

- * **Recommended Varieties:**
Pickling Cucumbers—'Spartan Dawn,' 'Improved Long Green,' and 'Saladin.'
Slicing Cucumbers - 'Spartan Valor', 'Victory', 'Marketeer' and 'Marketmore'.
- * **Soil Preparation:** Prepare a mellow seedbed similar to other vegetables by spading or roto-tilling to a depth of 4-6 inches followed by raking to firm the seedbed.
- * **Days to Germination:** 6 to 10 days.
- * **Planting:** Cucumbers are a **TENDER VEGETABLE** and should not be planted until the soil is warm and after all danger of frost. They may be planted in hills 5 feet apart or in rows. Plant seeds 1 inch deep, depending on available soil moisture. Plant enough seed to be sure of a good stand.
- * **Culture:** Cucumbers may need help getting through a soil crust. Control weeds throughout the summer. Occasionally this vegetable is damaged by cucumber beetles. Check current recommendations for control.
- * **Harvesting:** Keep all fruits picked as they reach usable size. Even one fruit left to mature on the vine can greatly reduce further fruit set.



LETTUCE is king of the salad bowl and is found in most every garden. But, when weather gets hot and days get longer, the lettuce plants begin to form flowers and seed stalks as well as sharper, bitter tasting leaves. For the cool weeks of late spring and early summer, lettuce produces abundantly.

- * **Recommended Varieties:**
Butterhead types - 'Buttercrunch' and 'Summer Bibb'.

Leaf types - 'Black Seeded Simpson', 'Grand Rapids' and 'Slobolt'.

Head types - 'Pennlake'.

- * **Soil Preparation:** The tiny seed of lettuce could be lost if planted in a seedbed of large soil chunks. So, it is best to prepare a crumbly seedbed for this plant. A soil high in nutrients can keep lettuce a rich, green color.
- * **Days to Germinate:** 4 to 10 days.
- * **Planting:** Lettuce, a HALF-HARDY VEGETABLE, can be sown directly in the garden 1/4 to 1/2 inch deep. If sown thickly, the many seedlings can help each other push through the soil crust to get an even stand of plants. The seedlings must be thinned to 6-8 inches between plants. You can stretch the harvest by making a few small plantings with several days between plantings.
- * **Culture:** Weeds, big or small, will spoil the show for lettuce. Lettuce varieties that are slow-to-bolt (slow to form flower stalks) in the summer heat may be planted to stretch your harvest.
- * **Harvesting:** Picking one leaf at a time is a method to harvest some of the open leaf lettuce types. The entire plant (head) above the roots of other lettuce types such as Butterheads and Head Lettuces should be harvested for use before the plants crowd each other. Crowded lettuce plants only give many stunted, bitter, outside leaves.

MUSKMELONS

Many say that muskmelons are best digested when eaten by themselves; and without a doubt, the sunshine-sweet, musky flavor could make a meal by itself. One half of a ripe golden-orange 5-inch fruit gives a full day's supply of vitamins A and C. Muskmelons need room to stretch out long vines and if your garden has the room to spare for muskmelons (5 feet between direct-seeded hills and 2-3 plants/hill), you're in for a tasty treat.

- * **Recommended Varieties:** 'Minnesota Midget', 'Earlisweet', 'Sweet-n Early' and 'Gold Star Hybrid'.
- * **Soil Preparation:** Warm, loose, well-drained soil is best for muskmelons.
- * **Days to Germination:** 7 to 12 days.
- * **Planting:** This long-season TENDER VEGETABLE may be directly seeded into your garden but is most productive when planted as transplants 14 to 21 days old from seeding indoors and then set in the garden after danger of frost is passed. (Seed indoors about May 10 or buy transplants that are stocky.) Use a peat-pot, cube or Jiffy-7 pot so the roots are not disturbed when transplanting. When grown with a clear plastic mulch (as shown on page 16), the vines produce many more fruits if weeds are eliminated.
- * **Culture:** Keep 'em weedless!
- * **Harvesting:** Muskmelon do not get sweeter after harvesting, only their texture changes. Here are a few hints for knowing when the melons are ripe:

1. The stem attached to the fruit will easily slip away from the fruit when gently pulled by hand. This is called the "full-slip stage".
 2. The underside of each melon has a pale spot where it rests upon the soil. When the color of this area turns from pale green to pale orange-yellow, the fruits are usually ripe.
 3. The curly tendrils near the fruit will usually become dried when the fruits are ripening.
- If you're wondering about kitchen recipes for muskmelons... eating a chilled, freshly picked melon with a fork or spoon is just a pure and simple pleasure!



ONIONS add their tang to many salads, soups, casseroles and even by themselves when fried, steamed, boiled or raw. A little onion goes a long way with flavor.

- * **Recommended Varieties:** 'Early Yellow Globe', and 'Sweet Sandwich'.
- * **Soil Preparation:** Onions are another HARDY VEGETABLE crop needing a fertile, loose, well-drained soil.
- * **Days to Germination:** 7 to 13 days.
- * **Planting:** Onions can be grown from seed or "onion sets" sown directly in the garden or from transplants. Seed is most commonly available and can be thickly sown 1/2 inch deep. Thin seedlings to 2-3 inches apart. Prevent the soil from crusting over the seeds after rains. Gently crumble the soil crust in the row by tamping with a rake or by hand. Rows are 1 1/2 feet apart.
- * **Culture:** Any variety of the standard onion can be used as a green onion if it is harvested when the bulb is small. Perennial Bunching Onion types will form green onions but not form a large bulb. Weedless, fertile soil with moderate moisture will go a long way in giving you a rich harvest. If onion maggots or thrips insects become a problem, consult the most recent Extension Service circular of insect control.
- * **Harvesting:** When bulbs ripen, their tops begin yellowing and falling over. When about 3/4 of your onions have fallen, you may use a rake to gently break over the tops that are standing. After all the tops are dead, gently pull the plants to be stored in mesh bags for air curing for 3 to 5 days in the shade and out of possible rain showers (to prevent sunburn and storage disease problems). Remove the tops to about 1 inch above the bulb. Store onions in mesh bags where it is cool and dry.

PEAS are a cool season crop that can be planted with the earliest vegetables. They are frost HARDY in the garden. Peas are very nutritious and are an excellent source for vitamins A, B complex and C. Early plantings can be very productive since they can be harvested before hot weather and before being attacked by a disease called powdery mildew.

- * **Recommended Varieties:** Early - 'Little Marvel', 'Knight', 'Maestro'; Mid-season - 'Green Arrow', 'Lincoln' or 'Wando'; Edible Pod Peas - 'Sugar Ann' or 'Sugar Snap'.

- * **Soil Preparation:** Roto-till or spade to a depth of 4-6 inches to warm and aerate the soil as soon as it is workable in the spring.
- * **Days to Germinate:** 6 to 15 days.
- * **Planting:** Plant seeds 1-inch deep. Drop seed about 1-inch apart in the row. Rows should be spaced 18-24 inches apart.
- * **Culture:** Thin plants 3-4 inches apart. Control weeds. Plants will bear longer if peas are picked regularly and not allowed to mature on the vines.
- * **Harvesting:** Harvest peas when the vines are dry to reduce disease problems. Use fresh or gently steamed in a small amount of water until tender. Serve with cream sauce or a dash of butter.



PEPPERS

Nothing like sweet green bell peppers can give a zesty awake flavor and aroma to tossed salads or to brighten-up the quiet flavors of steamed beets, beet greens, Swiss chard, cauliflower, cabbage and others.

- * **Recommended Varieties:** 'Early Prolific,' 'Gypsy' or 'Lady Bell.'
- * **Soil Preparation:** Peppers enjoy a loose, well-drained soil that has warmed under the late May and early June sun.
- * **Days to Germination:** 10 to 20 days.
- * **Planting:** By setting out transplants of peppers, we can see a longer season of harvest. If you are starting your own transplants, sow the seed on April 1st. Pepper plants, lovers of warm soil, are **TENDER VEGETABLES** (damaged by even light frost). If temperatures fall below 55°F., the young transplants will seem to sit and pout with slow, stunted growth and yellowing leaves. Just as with tomatoes, it is wise to plant each pepper plant in a shallow basin (2 to 4 inches deep) to give wind protection and catch moisture from even the brief rain showers.
- * **Culture:** Space the transplants 24 inches between plants and 3 feet between rows of plants. Keep a close guard against weeds by hoeing them out of the plant rows and into your garden pathways where the sun can dry the weeds. When temperatures are between 60°F. and 90°F. (daytime), the plants will flower and fruit. Add a mulch of grass clippings, compost or straw around the base of the plant to help peppers conserve water.
- * **Harvesting:** Keeping the ripe fruits picked from the plants will make the plant form more flowers and fruits. Cut the peppers from each plant by using a knife. Whether you thinly slice and dry them; steam the peppers until tender; eat them raw or in soups and sandwiches, the bright flavor of peppers (so high in vitamins A and C) will tell us why the world is thankful to the early native Americans for giving pepper seed (and many other fine foods) to the early explorers.

POTATOES are one of the most versatile and most productive of vegetables. Every gardener should grow a few "spuds" for the delight of the "earthy" new potato taste. Rural gardeners with space, can produce up to a year's supply of potatoes, while limited space gardeners may grow enough for one to six months.

- * **Recommended Varieties:** 'Red Norland' and 'Norgold Russet.'
- * **Soil Preparation:** Soil should be worked 6 to 8 inches deep for aeration and warmth.
- * **Days to Sprouting:** 10 days to 3 weeks.
- * **Planting:** Potatoes are best planted about May 10th; purchase certified seed potatoes. Do not use potatoes purchased from a grocery store for seed; they may have been treated with a sprout inhibitor. Plant cut tubers in a trench 2-3 inches deep and spaced 1 foot apart. Cut seed potatoes the same day they are planted. Seed treatment is not necessary.
- * **Culture:** Control weeds. Hill the rows in late June to prevent tubers from being sunburned.
- * **Harvesting:** Early planted Norland potatoes are ready to harvest about mid-July when expensive new 'California Rose' potatoes are commanding big prices - so grow your own. Dig potatoes before the soil freezes in the fall. Do not expose to direct sunlight longer than necessary. Store in the dark. Small amounts of potatoes can be successfully stored in burlap bags (in a cool location for 3-4 months).



PUMPKINS delight the eye of the young-at-heart, whether 9 or 90 years of age. From seed to sprawling vines, giant fruits, jack-o-lanterns, pumpkin bread and pies, the mysteries of growing plants are told in a grand style by the pumpkin.

- * **Recommended Varieties:** 'Spirit', 'Cheyenne Bush', and 'Autumn Gold'.
- * **Soil Preparation:** Pumpkin plants need loose soil to prevent soggy roots that are weakened and easily infected with disease.
- * **Days to Germination:** 10 to 14 days.
- * **Planting:** Like squash, cucumbers and melons, pumpkin is a **TENDER VEGETABLE** that thrives when soil is warm and the plants are untouched by frost. Whether you directly plant the seed or use transplants grown in peat-type pots, they can be planted in hills of 2 to 3 plants each and 8 feet to 10 feet between hills. The amazing bush-type variety, 'Spirit', can be grown in hills of 2 to 3 plants when hills are spaced 6 to 8 feet.
- * **Culture:** If your garden is small, a sturdy trellis, fence or compost pile could be used for the wandering vines. Pumpkin growing is usually trouble free except if drought occurs.
- * **Harvesting:** Pumpkin sweetness reaches a peak in cool

weather. Pumpkins can tolerate light frost and can be protected from hard frosts by covering them with their own vine and leaves as well as corn stalks, or storing the fruits in an out-building. When harvesting, cut the pumpkin vine and allow a 3 to 4 inch stem to remain on the fruit.

RADISHES perk up salads, sandwiches, dips, or before dinner munching.

- * **Recommended Varieties:** 'Cherry Belle', 'Champion' and 'White Icicle'.
- * **Soil Preparation:** As with all the garden vegetables, radishes grow best in a loose, well-aerated soil just as soon as the soil is workable in the spring.
- * **Days to Germination:** 3 to 10 days.
- * **Planting:** This **HARDY VEGETABLE** keeps its light, zesty flavor in the cool, moist weeks of early spring to early summer. Although it can be harmed by frosts, its rapid growth will make later (successive) plantings ready to fill the gap of damaged plants. Seed radishes in rows 1½ feet apart, and thin the seedlings 1-inch apart.
- * **Culture:** Be sure to thin radishes during the first week they sprout since overcrowding damages them during the second week when they begin to enlarge. Early spring plantings may escape the damage of flea beetles while young seedlings of late spring or early summer plantings may be ruined.
- * **Harvesting:** Gently pull radishes by hand when they mature to full size, wash them in cool water, slice or dice them for a salad or sandwich with real pizzazz!



SQUASH is an excellent source of vitamin A. Bush-type squash varieties of both summer and winter squash now make it possible for backyard gardens to grow both.

Summer squash are very productive if fruits are harvested when young and tender. Fruits should not be allowed to mature on the vine or production will cease.

Winter squash can be stored for a long period of time if fully matured. They are the easiest vegetable to store for winter use.

- * **Recommended Varieties:**
Summer Squash - 'Aristocrat', 'Gold Rush', 'Sunburst' or 'Butterstick'.
Winter Squash - 'Gold Nugget', 'Emerald', 'Buttercup' and 'Sweet Mama'.
- * **Soil Preparation:** Prepare the seedbed similar to other vine crops. See Cucumbers.
- * **Days to Germination:** 7 to 12 days.
- * **Planting:** Sow seed in hills 3-4 feet apart (for bush varieties) or scatter seed thinly down the row. Space rows 5 feet

apart. Plant seeds one inch deep or deeper, depending on soil moisture. Squash are **TENDER** and should not be planted until after all danger of frost is past.

- * **Culture:** Thin plants in hills to 2-3 plants and/or space single plants in the row at 2 feet intervals. Control weeds. Cucumber beetles may become a problem. Check current control measures.
- * **Harvesting:** *Summer Squash* are harvested immature and used before fruits are more than 9-inches in length. Fruit must be harvested continuously or the plants will stop setting fruit similar to cucumbers.
Winter Squash are harvested when fully mature. One of the signs of maturity is when the outer skin loses that shiny-glossy appearance. Pick fruits before a hard frost. Stems should be cut from vines but left on the fruits when stored.

TOMATOES

What's a garden without tomatoes? Boy, are those fresh sliced tomatoes wonderful and loaded with vitamins A and C! Tomatoes are one of the most widely used vegetables. They are used fresh for salads and sandwiches, canned for sauce, stews, hot dishes and pizza, or processed for relish, catsup or paste.

- * **Recommended Varieties:**
Cherry types—'Small Fry' and 'Sweet 100.'
Standard - 'Wayahead', 'Quick Pick' hyb., 'Sheyenne', 'Cannonball' or 'Floramerica'.
- * **Soil Preparation:** Warm the soil thoroughly by spading or roto-tilling before setting out tomato transplants.
- * **Days to Germination:** 4 to 6 days.
- * **Planting:** Set transplants of this **TENDER VEGETABLE** 3-4 feet apart in the row with 5 feet between rows. Set transplants deeply to protect them from drying winds. Roots will develop all along the buried stem. Remember, tomato plants can freeze. Protect young plants from cutworms. See page 13.
- * **Culture:** Tomatoes cannot produce well in a weed patch. Avoid overhead sprinkling, it can cause leaf disease. Tomatoes require at least six hours of direct sunlight each day.
- * **Harvesting:** Plant adapted varieties. Large-vined hybrid tomatoes may ripen during long, warm seasons, but you may be disappointed other years. Vine ripened fruits are most flavorful for fresh use. The red-tomato color of canned tomatoes can be enhanced if fruits are harvested one or two days ahead of processing. Process only sound, mature fruits. Late season "green ripe" tomatoes can be ripened indoors. Speed of ripening can be controlled by storage temperatures.



WATERMELONS and pumpkins tend to fascinate children. Why not grow some! You'd be surprised how melons can keep their interest in gardening, watching and waiting for the fruits to grow and develop. Some gardeners say watermelons take too much space - maybe, but the kids might even help pull weeds if they have a "stake" in the garden.

- * **Recommended Varieties:** 'New Hampshire Midget', 'Sugar Baby', 'Yellow Baby' and 'Sweet Favorite'.
- * **Soil Preparation:** Spade or roto-till the soil to a depth of 4-6 inches to aerate and warm the soil.
- * **Days to Germination:** 7 to 10 days.
- * **Planting:** Watermelons may be planted in hills 6-8 feet apart or planted in rows with plants thinned to two feet apart within each row. Sow seeds one inch deep. Be sure they are

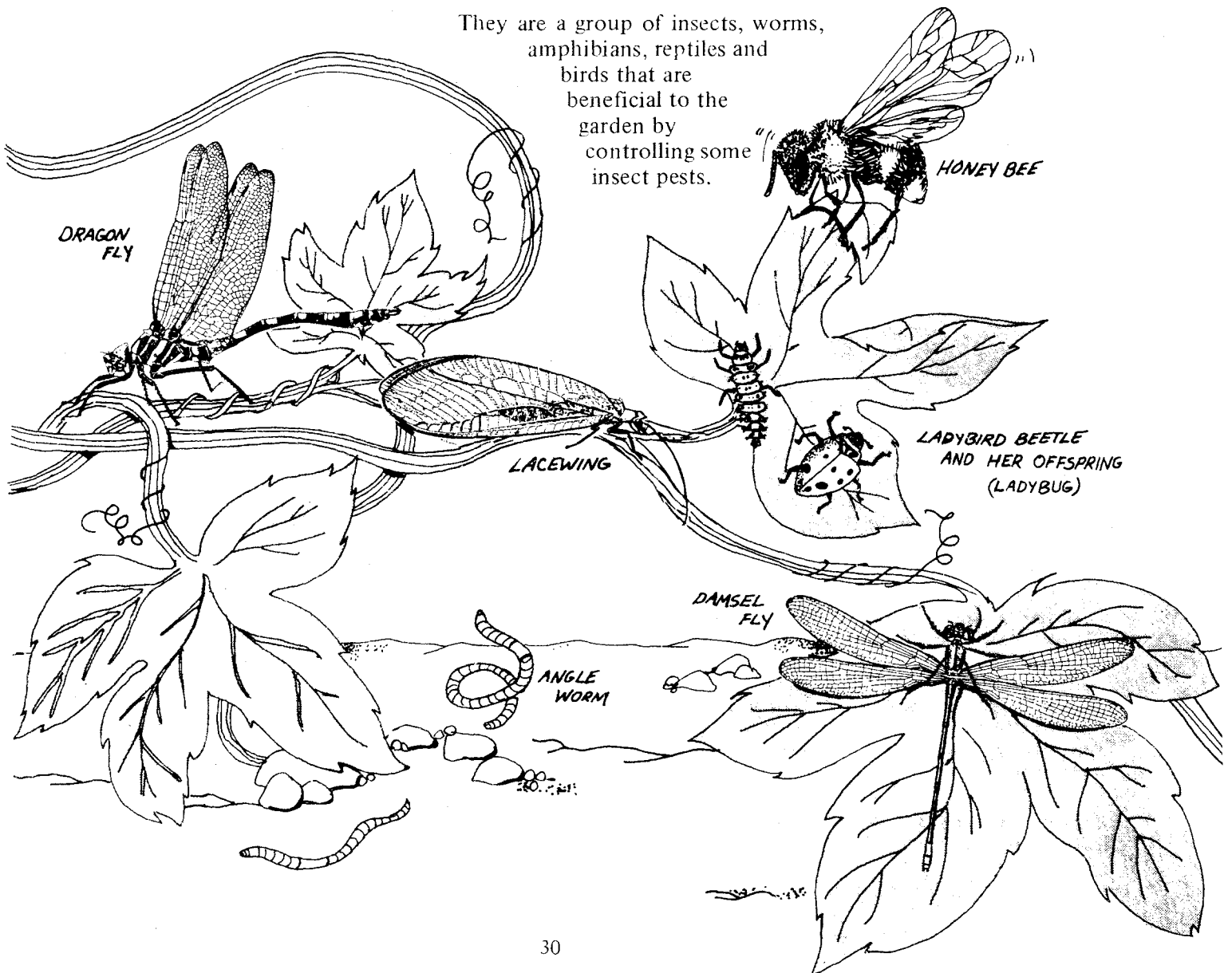
planted in moist soil. Watermelons are a warm season crop and should not be planted until all danger of frost is past. For early watermelons, transplants may be used. See p. 27 under muskmelons-planting.

- * **Culture:** Control weeds.
- * **Harvesting:** Watermelon maturity can be determined by the color of the bottom surface - as the melon ripens the "ground spot" turns from a whitish-green to a rich yellow. Also, fruits are ripe when they lose that glossy appearance and take on a dull look. Watermelons do not sweeten if harvested immature.

The 'good guys'

THE FRIENDS OF THE GARDEN

They are a group of insects, worms, amphibians, reptiles and birds that are beneficial to the garden by controlling some insect pests.



Sprouts:

How To Be A Year-'Round Kitchen Gardener -
Come Rain, Shine, Winter Snow
Or Summer Sun

To munch a salad, a sandwich or taste a home-made vegetable soup with freshly grown greens is a treat. But in the middle of winter, that treat would be scrumptiously delicious!

You ask where to find a garden in the winter? Sprouts (sprouted seeds) are an answer.

When some already healthful seeds are sprouted, their usable vitamins, minerals and proteins are often greatly increased and can give us delicious foods for just a few pennies per serving. Here is how:

- Use a wide-mouth, clear glass jar (quart size). Place about 2-3 tablespoons of fresh, clean seed that has not been treated with chemicals against insects or plant diseases.

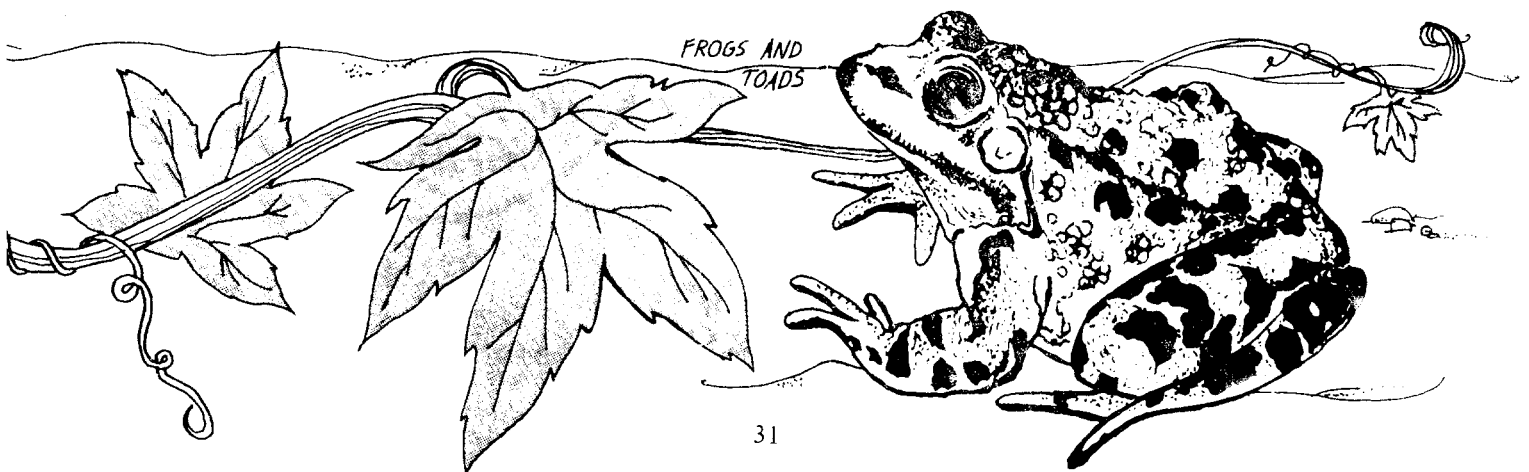
Use these seeds: **alfalfa seed**
mung beans
lentils
radish seed
wheat

Others to try are: **barley, buckwheat, kidney beans, pinto beans, soybeans, corn, dill, fenugreek, flax, garbanzo beans, millet, pumpkin seed, oats, sunflower seed (raw, unsalted).**

- Add three cups of water to the quart jar.
- Cover the jar mouth with a doubled piece of cheesecloth held tightly to the jar rim with strong rubber bands.
- Soak the seeds overnight and drain off the water in the morning.
- Rinse the seeds by running water into the jar and through the cheesecloth screen.
- Store the jar upside-down in a warm 65^o-70^oF. dark place.
- Rinse the seeds twice each day in lukewarm water (morning and evening) until they sprout small leaves.
- Place the jar near a window for two to eight hours of indirect sunlight for a gentle sunbath to make them green.

When you want to "harvest" your jar garden, you can rinse the sprouts to remove extra seed hulls that you may not want and serve whole instead of lettuce in sandwiches and salads, or to add to hot-dishes, casseroles and soup during the last three minutes of cooking.

Sprouts may be kept for several days after their leaves are green by covering the jar with a lid, plastic bag or putting the sprouts in a plastic bag for storage in the refrigerator. Rinse the sprouts again before serving.



Seed Companies:

W. Atlee Burpee Company
300 Park Avenue
Warminster, PA 18974

Farmer Seed & Nursery Co.
Faribault, MN 55021

Henry Field Seed & Nursery Co.
Shenandoah, IA 51602

Gurney Seed & Nursery Co.
1448 Page Street
Yankton, SD 57079

Harris Seeds
Moreton Farm
3670 Buffalo Road
Rochester, NY 14624

Johnny's Selected Seeds
Foss Hill Road
Albion, ME 04910

Seeds Blum
Idaho City Stage
Boise, ID 83706

Letherman's Inc.
1221 Tuscarawars St. E.
Canton, OH 44707

J.W. Jung Seed Co.
Randolph, WI 53957

Earl May Seed & Nursery Co.
Shenandoah, IA 51603

Geo. W. Park Seed Co., Inc.
Cokesbury Road
Greenwood, SC 29647-0001

R.H. Shumway Seedsman
Rockford, IL 61101

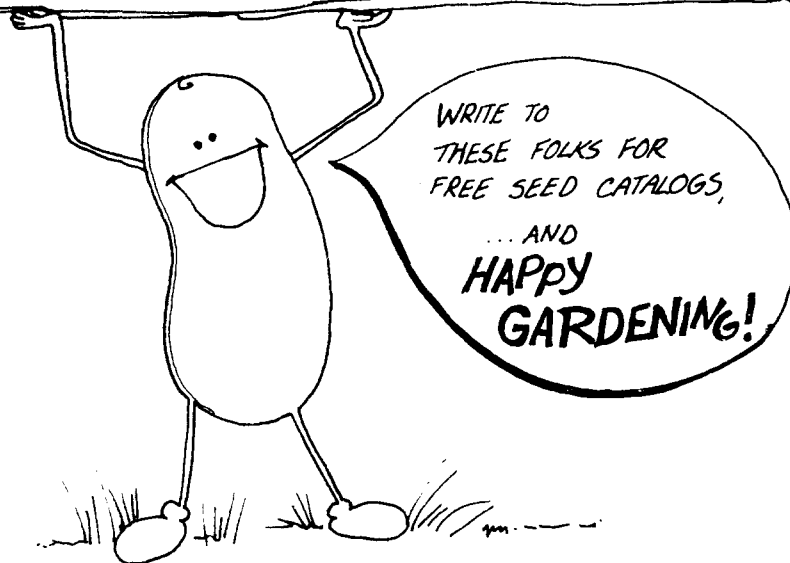
Stokes Seeds
Box 548
Buffalo, NY 14240

Otis S. Twilley Seed Co.
P.O. Box F65
Trevose, PA 19047

Liberty Seed Co.
P.O. Box 806
New Philadelphia, OH 44663

Siegers Seed Co.
7245 Imlay City Road
Imlay City, MI 48444

Shepherd's Garden Seeds
7389 W. Zayante Road
Felton, CA 95018



Vegetable Planting Guide

Vegetables	Seeds or plants for each 10 ft. of row	When to plant (look below chart for code numbers)	Plant and row spacing		Days until edible	Yield per 10 ft. of row
			Inches between plants	Inches between rows		
Asparagus	7 crowns	1	18-24	36-48	1-2 years	3-4 lb.
Beans, bush	1-1/2 oz.	3,4,5	2-3	24	50-70	6 lb.
Beans, lima	1-1/2 oz.	4	4-6	24	65-90	2 lb.
Beans, pole	1 oz.	4	4-6	24	45-65	3-4 lb.
Beets	1/2 packet	1,2,3,4	2-3	12-18	60-110	10 lb.
Broccoli	5-7 plants	1,5	18-24	24-30	60-80	10 lb.
Cabbage	7-10 plants	1,2,5	18-24	20-28	60-100	10 heads
Carrots	1/2 packet	1,2,4,5	2-3	12-18	60-100	10 lb.
Cauliflower	5-10 plants	1,5	18-24	24-30	60-80	10 lb.
Celery	20 plants	2,5	6	20-24	120-150	8-13 lb.
Chinese cabbage	7-10 plants	6	12-18	20-24	80-100	10 heads
Corn, sweet	1 packet	3,4,5	8-12	30-36	65-110	11-13 ears
Cucumbers	1/2 packet	4,5	15-18	48-60	50-80	10 lb.
Eggplant	6-8 plants	4	18	24-30	75-85	20 fruits
Endive	1 packet	1	6	12	65-85	6 lb.
Kale	1 packet	1,6	4	12-18	60-70	2-5 lb.
Kohlrabi	1/8 packet	1,2,3	4-6	15-24	50-60	8 lb.
Lettuce (leaf)	1 packet	1,2,3,6	—	6-15	40-60	5 lb.
Muskmelon	1 packet	4	18-24	48-60	90-120	10 melons
Mustard	1 packet	1,2,3,6	4	12-18	40-60	4-8 lb.
Okra	1/4 oz.	3	12	18-24	70-90	5 lb.
Onion seed	1 packet	1,2,3	2-3	12-15	100-140	10 lb.
Onion sets	60 sets	1,2	2-3	12-15	90-100	10 lb.
Parsley	1 packet	1,2,3	4	12-18	80-100	1/2-1 lb.
Parsnips	1 packet	1,2	3	18-24	140-160	10-12 lb.
Peas	1-1/2 oz.	1,2	1-2	6-12	45-90	3 lb.
Peppers	5-7 plants	4	18	18	70-75	80 fruit
Potatoes (Irish)	10 pieces	1,2,3	12	24-36	140-150	30 lb.
Potatoes (sweet)	10 sprouts	4	18	36-48	140-150	12 lb.
Pumpkins (winter squash)	1-2 hills	4	4	60-72	90-120	40 lb.
Radishes	1 packet	1,2,6	1-1/2	6-12	30-60	10 bunches
Rhubarb	3 crowns	1	36-72	36-60	1 year	12 lb.
Spinach	1 packet	1,2,6	3	12-18	50-70	5 lb.
Squash (summer)	1/2 packet	4	4	24-30	60-75	60 fruit
Swiss chard	8 plants	1,2	6-8	15-18	60-75	12 lb.
Tomatoes	2-5 plants	4	24-36	24-48	70-100	60 lb.
Turnips	1/8 packet	5,6	18-24	18-24	60-90	10 lb.
Watermelons	1/4 packet	4	60-84	60-84	90-130	4-10 melons

Planting Date Code Numbers

1. As soon as soil can be worked without becoming cloddy – generally mid-to-late April.
2. Approximately 10 days later than number 1.
3. Approximately 20 days later than number 1.
4. After all danger of frost is past.
5. Early June plantings of longer season vegetables for fall crops.
6. Late June-early July planting of shorter season vegetables for fall crops.

Helping You Put Knowledge To Work

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